1174.b. 27
2

A NEW and EASY METHOD
OF CURING
The LUES VENEREA,
BY THE
Introduction of MERCURY into the Syſtem
through the Orifices of the abſorbent Veſſels
on the Inſide of the Mouth.

WITH THE
REMARKS of Dr. HUNTER and Mr. CRUIKSHANK
in favour of this Practice.

ALSO
An ESSAY on ABSCESSES,
and other Obſervations in SURGERY.

By PETER CLARE, SURGEON.

> Omnipotentis Dei eſt ſontes caſtigare, noſtrûm vero miſeris pro virili ſuccurrere, atque ægris opem ferre.
>
> SYDENHAM.

The THIRD EDITION.

LONDON:
Printed for T. CADELL, in the Strand.
MDCCLXXX.
[Price 2s. 6d.]

TO THE

MASTER, WARDENS,

AND

COURT of ASSISTANTS,

OF THE

CORPORATION of SURGEONS
IN LONDON,

THIS BOOK IS INSCRIBED,

WITH GREAT RESPECT,

BY

THE AUTHOR.

PREFACE.

THE advantages derived to patients from the practice ſuggeſted by my diſcovery of the Abſorption of Calomel into the circulation, by means of friction on the internal ſurfaces of the mouth, being great and uncontroverted, I am ſtrongly induced to recommend a mature conſideration and candid trial of it to every gentleman of the faculty. Although it may be deemed, for a moment, great preſumption to deviate from the ordinary modes of practice, yet a little reflection will evince, that he is but a very indifferent member of the community who does not convey his obſervations and diſcoveries to the world, if it were but to excite a ſpirit of enquiry and emulation in others, who poſſeſſing ſuperior abilities for the taſk, may improve and bring his plans to perfection.

My ingenious friend Mr. *Cruikſhank* having ſeen ſeveral of my patients, as well before they had entered on the proceſs as during the courſe, and alſo after the cure, the public are referred for further ſatisfaction to his teſtimony *. Previous

---

* "I ſeriouſly declare, that in a matter of ſo "much moment, in which the health of millions "might be concerned, and where my own repu- "tation was actually at ſtake, no motive could "have induced me to recommend a practice I "ſecretly ſuſpected would not be attended with "ſucceſs.

"The great hinge on which your method "turns, is the abſorbing property of the human "body. You affirm, that your Calomel is ab- "ſorbed by the lymphatic veſſels of the mouth. "I find no difficulty in believing that it is; and "am ſatisfied that this, as well as many other "powders, may be abſorbed by the ſurfaces of "the body." *Cruikſhank*'s Letter to *Clare*, 2d Edit. p. 7.

"My

vious to this I had frequently ſent patients to *Windmill Street*, that Dr. *Hunter*

" My experiments, as far as they go, confirm " your practice." Page 230, head the 10th.

In the firſt edition of Mr. *Cruikſhank*'s Letter addreſſed to me, *on my new method of introducing Mercury into the circulation by means of the Abſorption which takes place from the inſide of the mouth*, that gentleman ſays, " I own I am much diſ" poſed to believe, that your method of rubbing " Calomel will be attended with ſucceſs. One " thing I have no doubt of, it will throw light " on the modern doctrine of Abſorption, and it " may lead to ſtill further important diſcoveries." P. 90.

In the 2d edition, Mr. *Cruikſhank* ſays; " Thus, " Sir, I have examined, with all the attention and " impartiality my preſent ſituation would admit of, " the merits of your propoſed method of rubbing " Calomel on the internal ſurface of the mouth. " The propoſal ſtruck me at firſt; I thought it " more than probable you would ſucceed; I am " now ſatisfied that you have ſucceeded."—— " Should more weighty objections be even " found to lie in practice againſt your method, " than thoſe I have taken notice of, (for what " method has no inconveniency?) you will at " any rate have the merit of having ſuggeſted " an ingenious idea, of having done your utmoſt " to be uſeful in your profeſſion, and (if I may " be allowed to preſage) of having laid the foun" dation of ſome excellent future practice in ſur" gery." P. 238.

Hunter and Mr. *Cruikſhank* might inſpect and ſtrictly examine them; and theſe gentlemen gave me in return the ſtrongeſt aſſurances of their approbation of this method. My motives for acting in ſo circumſpect a manner, were not only an idea that ſuch meaſures were proper to be taken by one who wiſhed to obtain the good opinion and confidence of the public, but a deſire of preventing malicious cenſure; alſo this conſideration, that the beſt cauſe doth receive additional weight and luſtre from the teſtimony of competent and credible witneſſes. Some caſes are ſelected from the many cures performed; to which many others equally ſucceſsful would have been added in this edition, but that the publication of caſes is conſidered by many as carrying an oſtentatious, and by ſome, an empirical appearance,

ance, eſpecially when they are very numerous and extraordinary.

It is almoſt univerſally admitted by the profeſſion, that Mercury is abſolutely neceſſary in the cure of the *Lues venerea*; and the deſign of the following pages is to prove, that the introduction of Calomel into the ſyſtem by friction on the internal ſurfaces of the mouth, is the beſt method of adminiſtering this powerful antidote *.

---

* Dr. *William Saunders*, Phyſician to *St. Thomas's Hoſpital*, in his Appendix to Mr. Profeſſor *Plenck's New and Eaſy Method of giving Mercury*, tranſlated by the Doctor, ſays, p. 136,—"Though I believe the operation of *Mercury* "in removing particular ſymptoms may be aſſiſted "by *antimonials*, *ſarſaparilla*, *mezereon*, *guaiacum*, "and other medicines, yet I am perſuaded, "that cures have been vainly attributed to theſe, "which could not have been performed independent of *Mercury*; and from the prejudices "generally prevailing againſt the uſe of *Mercury*, "the public have been deceived by boaſted ſpecifics which have been ſaid to contain no *Mercury*, though ſuch of them as have acquired "any

Few attempts to improve any art or ſcience are well received at firſt by the public. Mankind too frequently think themſelves affronted, and are prone to reject innovations as originating in ſelf-conceit and impertinence. There are ſome, indeed, poſſeſſed

---

" any degree of reputation, have been found, " by a careful analyſis, to have *Mercury* in their " compoſition."

A ſudden ſalivation, every now and then, has explained beyond a doubt, that there was *Mercury* contained in their compoſition, though concealed with the niceſt art, and denied with the utmoſt aſſurance.

Dr. *William Fordyce*, in his *Review of the Venereal Diſeaſe*, p. 136, Remark the 8th, ſays,—" *Mercury* alone will in general cure moſt venereal complaints; the *ſarſaparilla* will perhaps " always cure what reſiſts the power of *Mercury*: " it is therefore probable that we may find in " *Mercury* and *ſarſaparilla*, properly combined, a " certain cure for every caſe that can be called " venereal."—Dr. *George Fordyce*, Phyſician to *St. Thomas's Hoſpital*, obſerves, " That when " there is any ulcer, or any ſymptom of the matter's having been abſorbed, the patient cannot " be cured with ſafety and certainty unleſs *Mercury* be exhibited." *Elements of the Practice of Phyſic*, p. 359.

ſeſſed of knowledge and good ſenſe, who are ſlow either to cenſure or applaud; requiring repeated proofs before they coincide with, or condemn any new practice. I hope in time to be able to convince their judgement, and to ſecure their approbation.

Inoculation, the moſt noble diſcovery, perhaps, that was ever made, as having preſerved an infinite number of lives, although we behold it at length univerſally adopted, at the firſt had a thouſand prejudices to encounter *. There is, undoubtedly, a very great ſimilarity between this mercurial proceſs by abſorption, and that of inoculation. It

---

* *The double inciſion* in amputations of the limbs, in preference to the *ſingle one*, a very important improvement in ſurgery, and the introduction of *the ligature of the blood veſſels*, to ſupply the place of ſearing them with *the actual cautery*, notwithſtanding their conſpicuous advantages, were known long before they were generally practiſed.

It is well known the ſmall pox is rendered much more mild, when conveyed into the ſyſtem by inoculation, than it is in what is called *the natural ſmall pox*. If a poiſon be made more mild by being thus abſorbed, why may not an antidote alſo? If a leſs quantity of the variolous matter be not ſo noxious, yet be equally efficacious with a larger, may not the caſe be the ſame with reſpect to an antidote?

Should it be aſked if this new method *always* ſucceeds—the anſwer is, that it does not; nor could it be expected, as it is a fact that *Mercury* alone will not effect a cure in every venereal caſe *. When *Mercury* ſucceeds,

---

* It was the obſervation of a ſurgeon who had acquired great reputation by the cure of the *Lues venerea*, that "*too much Mercury might be given ſo as*

ceeds, (which it does almoſt univerſally) it certainly will in this proceſs of abſorption, which effectually and readily conveys the *Mercury* into the ſyſtem, and keeps it there much better than the common and ordinary methods do. It muſt be obſerved alſo, that the neglect of the patients in purſuing the medicines and directions of their ſurgeons properly in every particular, will fruſtrate the beſt of remedies; and again, nothing is ſo dangerous, or yet ſo common, as patients diſcontinuing them too ſoon, and ſubjecting themſelves thereby to a relapſe *.

---

as for it to loſe its effect, and he adviſed the leaving it off for a while, and then to return to it, when, he ſaid, it would generally be found to ſucceed." This obſervation appears to have been well founded.

Dr. *George Fordyce*, in his Elements of the Practice of Phyſick, p. 117, ſays, "There is a "*maximum* in the doſe of all medicines, ſo that "if they be exhibited in greater quantity, their "effects are loſt inſtead of being increaſed."

* The friction which attends the exerciſe of walking, riding, &c. will often prevent venereal

I have ſometimes found it neceſſary to give *a ſolution of a quarter of a grain of Mercury ſublimate* in five or ſix drops of water, and adding this to the *Calomel*, have applied it to the inſide of the cheek with a view to expedite an affection of the ſalivary glands, and to aſſiſt in the cure; which addition has produced the deſired effect, as Mr. *Cruikſhank* will teſtify. Surely it is much better to give the ſublimate thus than in the common way, which often diſorders the ſtomach exceedingly.

There is no mercurial, in my opinion, better adapted, on the whole, for abſorption and the cure, than *Calomel*. It

---

or other ſores from healing, although the ſyſtem is ſaturated with Mercury; and if patients ſo circumſtanced cannot or will not forego the fatigues of buſineſs or their pleaſures, and peremptorily refuſe to ſubmit to reſt, and an horizontal poſition of the body, they cannot reaſonably expect to be cured.

It muſt be owned that other preparations of *Mercury* may produce the ſame good effect, and I know, from repeated experience, the corroſive ſublimate will, when adminiſtered in this manner, that is, on the principle of abſorption *from a thin cuticular ſurface*, in preference to the ſtomach, or the *thick external ſkin*, which is the point I contend for, rather than for the particular preparation of *Mercury*. Though *the external ſkin* certainly abſorbs *water*, yet it does not appear to me to abſorb *ſalt* diſſolved in water. *A ſolution of ſublimate* rubbed on the *entire outward ſkin* *, produces none of the effects of *Mercury* on the ſyſtem, but this ſolution rubbed on *the thin cuticular ſurfaces of the mouth*, does produce the effect of

---

* When the ſkin is *excoriated*, without doubt the ſublimate may be abſorbed, but, I apprehend, not otherwiſe.

Mercury, being abſorbed from thoſe ſurfaces *. We know that the minutely divided particles of *quickſilver* in the *ung. merc. cærul.* are frequently conveyed into the habit by long friction, and we alſo know they are often rejected for days and weeks together, owing to the impenetrable texture and denſity of the ſkin, which circumſtance juſtifies the calling this *an uncertain and ill abſorbing ſurface*, and is a ſtrong reaſon with me for preferring *the internal cuticular one.*

---

* "The cuticle (or ſcarf-ſkin) is itſelf not vaſcular, inorganic, and inſenſible. It not only makes an external covering to the body, but it lines ſome internal cavities, as *the mouth*, *the noſe*, *the œſophagus*. It is every where *porous*, but theſe *pores* are probably of various diameters; and in ſome parts, I ſhould alſo preſume, it might be more *porous*, in others leſs ſo. This cuticle is alſo thicker in ſome places, and thinner in others. There is a greater ſecretion *on thin cuticular ſurfaces*, and of courſe they may be ſuppoſed *more porous*. The abſorbents lie under it, and muſt be ſtimulated through it.——Abſorption may take place through *the thickeſt* cuticular ſurface, *eſpecially* if *ſevere* and *conſtant friction* be employed." See *Cruikſhank*'s Letter to *Clare* on this ſubject, p. 100, of the 1ſt edition of An Eſſay on Abſceſſes, Wounds, &c.

The generality of ſpeculative writers form their theories firſt, then ſearch for facts to eſtabliſh their doctrine; this is reverſed here, having diſcovered the fact * firſt, and being happy in having it elucidated by theory, and corroborated by anatomy, reaſon, and ſucceſs.

With reſpect to the latter part of this work, on the ſubject of Abſceſſes, &c. †, having ſeen, in a long attendance on the practice of an hoſpital, *wounds* and *ulcers* treated by means quite oppoſite to each other, *lenient* and *irritating*, I formed an early opinion in favour of the firſt; from which it appeared to me, that in general the greateſt advantages were

---

* *This new mode of abſorption.*

† I have thought proper to alter the arrangement of this book, and to place the Eſſay on Abſceſſes, &c. at the concluſion.

derived, and ſeldom, if ever, any miſchief.

My own practice ſince has confirmed me in this opinion.

Being perſuaded this method of treatment will conduce much to the benefit of mankind, an attempt to recommend it, I hope, will continue to meet with a candid reception from the public.

Mr. *Pott* uſed frequently to remark, (and he has ſince publiſhed the ſame ſentiments in the preface to his *Obſervations on Wounds of the Head*,) " That many of thoſe gentlemen who came to the hoſpital to finiſh their chirurgical education, were too apt to fix their attention on the operative part of ſurgery only. Operations, he obſerved, would ſeldom occur to them in practice, in compariſon with the common buſineſs of *Surgery, Wounds* and *Ulcers*: as theſe muſt daily come under their care, he wiſhed them *to endeavour particularly to make themſelves maſters of the healing art.*"—There certainly is good ſenſe in this advice, and it has been my ſtudy to purſue it.

Without attempting to derogate from the importance of great and neceſſary operations, let me make an obſervation in behalf of thoſe who, diſcovering an averſion to cutting, are reported to decline the knife becauſe they are deficient in proper reſolution or the requiſite abilities, or perhaps in both. It will, however, ſcarcely be denied, (being daily ſeen) that ordinary abilities ſuffice for this purpoſe; the true, and perhaps only reaſon why ſome ſurgeons are ſparing of the knife is, that (beſides a firm perſuaſion of the ſuperior excellence of a contrary practice) they feel a ſtrong propenſity to do by others as they would be done by, a rule from which no conſideration would ever tempt them to depart.

I am happy in every opportunity of giving the reſpectful teſtimony of a pupil to the merits of that great profeſſor Dr. *Hunter*, whoſe diſtinguiſhed abilities, joined with indefatigable attention, have exalted him to the higheſt rank in his profeſſion; and whoſe celebrated lectures in anatomy, at the ſame time that they explain the ſtructure of the human body, and the origin of diſeaſes, point out their nature and cure, and have greatly improved the therapeutic art.

The Doctor's grand anatomical muſeum conſtitutes his chief ambition and delight. It is ſhewn to the inquiſitive and learned of every nation with the utmoſt affability and polite condeſcenſion. It does him honour in the preſent, and muſt certainly endear him to future ages.

The reader will find in this edition many weighty arguments advanced in favour of the new mode of Abſorption by Mr. *Cruikſhank*, whoſe "*Remarks on the Abſorption of human bodies in general, together with ſome experiments on inſenſible perſpiration,*" may be had of the publiſher, there being a few copies of the 2d edition of the Eſſay on Abſceſſes, &c. remaining.

It has been thought proper to give *Anſwers* to a few objections raiſed by ſome candid members of our profeſſion: as to others of a very different caſt, of whom there are too many in every vocation, they do not deſerve any ſort of attention or regard.

> *Non mihi, ſed Rationi, aut quæ Ratio eſſe videtur*
> *Milito; ſecurus quid mordicùs hic tenet, aut hic.*
>
> SCALIGER.

Several extracts from the books of modern writers are inſerted, not merely with a view to enlarge, (the contrary being my wiſh and ſtudy) but to improve and embelliſh, and render this book of value to the purchaſer.

Having been cenſured, on a former occaſion, for making up a book of quotations, caſes, and old ſtories, I ſhall probably meet with a ſimilar treatment on account of the preſent publication *. If, however, the quotations, caſes, and narrations, ſhould appear to be to the point, and to contain needful information, what ſome call

---

* The quotations, it is true, might have been omitted, and the reader have been referred to the reſpective books; but many chirurgical ſtudents and others, by whom this may be read, are not, perhaps, poſſeſſed of the different works. I flatter myſelf the extracts are ſuch as will do credit to the authors, and render any apology, for the liberties I have taken with them, unneceſſary.

call a Farrago, others will, perhaps, conſider as a uſeful Miſcellany.

Si illum objurges vitæ qui auxilium tulit;
Quid facias illi, qui dederit damnum aut malum?
TERENCE Andriæ.

Dr. *Mead* having publiſhed a ſenſible account of the ſtone in the kidneys and bladder, and of the moſt approved method of treating this diſorder, his remarks are added in the way of notes, notwithſtanding they are very long.

I have given a ſhort hiſtory of lithontriptic and other pretended *ſpecific* medicines, and have endeavoured to ſubſtitute a more ſafe and rational method of cure *.

---

* Mr. Profeſſor *Plenck* ſays in his preface, ſpeaking of the ſordid venders of arcana; "The "conſtitution of phyſic at *Vienna* is in this re-"ſpect well regulated; and this we owe to the "wiſe councils of the noble *L. B. Van Swieten*, "who employs his whole attention, and beſtows "great labour in enlarging the limits of medi-"cine, eſpecially of what relates to the practice: "his attention wholly conſiſts in this, that the "moſt efficacious and certain remedies may be

It is with a very pleaſing ſenſe of gratitude that I make my public acknowledgements to ſeveral gentlemen (ſome of the faculty among the reſt) for their early approbation of this practice; the future and permanent ſucceſs of which I have been anxious about, for their ſakes, as well as my own, and alſo that of the community, which is eſſentially intereſted in the event.

" daily found out for the benefit and advantage " of the unhappy ſick, and likewiſe in totally " baniſhing quacks, mountebanks, and the avaritious venders of arcana; while, in the mean " time, at *Paris*, *London*, and in other large cities, " that race of men are with impunity tolerated, " to the common prejudice of mankind, and the " reproach of phyſic. One wiſe reſolution of this " eminent man, is, that if any remedy be ſufficiently recommended for its great utility, it is " immediately publiſhed for the general good; for " certainly the private advantage of one or two " perſons is not to be preferred to the common " good of our fellow citizens."——The empirics in this country laugh at our colleges and police, and exclaim,

O cives, cives, quærenda pecunia primum eſt.

Far from thinking there will be any cauſe to reflect in future on thoſe who have eſpouſed this practice either in a public or private manner, their teſtimony will, I truſt, exhibit to the world a proof of ſuperior diſcernment, liberality of ſentiment, and truly laudable candour. We have every reaſon to expect ſucceſs from a practice founded on an anatomical and phyſiological baſis, and which ſeems to be adapted in a peculiar manner to the ſtructure of the whole body, a body compoſed of a great variety of nervous, irritable fibres, and of veſſels or conduits, circulating their reſpective fluids after the manner of an *hydraulic* machine *.

---

* For the information of ſome of my readers, I have ſelected from Mr. *Cheſelden* the 12th chapter of his *Anatomy*, &c. p. 216, which gives a conciſe, yet general account of the courſe of the aliment and fluids; the ſanguiferous, lacteal, and lymphatic veſſels, and the whole animal œconomy.

With regard to ſaliva, it is ſaid to promote an appetite, and help digeſtion.

" The aliment being received into the mouth, " is there maſticated and impregnated with ſaliva, " which is preſſed out of the ſalivary glands by " the motions of the jaw and the muſcles that " move it and the tongue. Then it deſcends " through the pharynx into the ſtomach, where " it is digeſted by the juices of the ſtomach, " (which are what is thrown out of the glands of " its inmoſt coat, and ſaliva out of the mouth) " and a moderate warmth and attrition. Then " it is thrown through the pylorus or right orifice " of the ſtomach into the duodenum, where it is " mixed with bile from the gall bladder and liver, " and the pancreatic juice from the pancreatic " gland. Theſe fluids ſerve farther to attenuate " the digeſted aliment, and probably to make the " fluid part ſeparate better from the fœces. After " this, it is continually moved by the periſtaltic " motion of the guts, and the compreſſion of the " diaphragm and abdominal muſcles, by which " forces the fluid parts are preſſed into the lac- " teals, and the groſs parts through the guts to " the anus.

" The chyle, or thin and milky part of the " aliment, being received into the lacteals from " all the ſmall guts, they carry it into the recep- " taculum chyli, and from thence the duc- " tus thoracicus carries it into the left ſubclavian " vein, tion. As a proof that it does ſo, whenever the duct is divided in the cheek, and the ſaliva eſcapes through the wound, the patient immediately

" vein, where it mixes with the blood, and paſſes " with it to the heart.

" All the veins being emptied into two branches, " viz. the aſcending and deſcending *cava*, they " empty into the right auricle of the heart; the " right auricle unloads into the right ventricle, " which throws the blood through the pulmonary artery into the lungs; from the lungs the " blood is brought by the pulmonary veins into " the left auricle, and from that into the left ventricle, by which it is thrown into the aorta, and " diſtributed through the body. From the extremities of the arteries ariſe the veins and lymphatics; the veins to collect the blood and bring " it back to the heart, and the lymphatics to return the lymph or thinner parts of the blood, " from the arteries to the veins and the vaſa lactea, where it mixes with the chyle, and then " paſſes with it into the left ſubclavian vein, and " to the heart.

" All the fluids that paſs into the ſtomach and " guts being carried into the blood-veſſels, the " greateſt part of them are ſeparated and carried " off by proper veſſels, viz. urine from the kidneys, bile from the liver, &c. and theſe juices " carry along with them whatever might be injurious to the animal œconomy."

loſes his appetite, and becomes extremely emaciated, but recovers both when the ſaliva is reconveyed through its proper channel into the ſtomach.

“ The ſaliva is ſecreted by ſeveral
“ glands of the mouth; and the
“ principal part of it is thrown down
“ into the ſtomach, to anſwer ſome
“ purpoſe in the digeſtion of the
“ food. It is a fluid of an adheſive
“ viſcidity, with difficulty diffuſible
“ through water. It conſiſts of wa-
“ ter, a mucilage ſimilar to that of
“ the *mucus* and the ſalts of the
“ blood, but not in ſo large a pro-
“ portion as they are contained in
“ the ſerum. It contains a larger
“ proportion of water than the *mu-*
“ *cus*. In its other properties it is
“ ſimilar to the *mucus*, in as far as
“ they have been inveſtigated.” Dr. *G. Fordyce*'s Elements, &c. p. 45.

Mr. *Plenck* has remarked, p. 116, "that a ſimple mucilage deſtroys the "ſpecific *ſtimulus* of Mercury, while "at the ſame time its antivenereal "virtues are preſerved."

Grande tulit punctum qui miſcuit utile dulci
Mercurio ſputum *; *reddent bene mixta ſalutem.*

It has been ſuggeſted that the making the cure of the *Lues venerea* more expeditious and eaſy to the patient, inſtead of conferring a benefit, does an injury to ſociety, as it encourages vice by taking away in a great degree the puniſhment attending it. Not long ſince application was made to a perſon high in office to grant a patent for *a venereal preventive*, which was refuſed; at the ſame time the parties were told, that every encouragement would be given to remedies which *cured* that diſorder, but not to thoſe

---

* Vel *mucum*.

medicines (if any ſuch there were) by which it was to be *prevented**.

†‡† A *Gloſſary* is added, for the uſe of thoſe who are unacquainted with the terms of art.

Chancery Lane,
Sept. 25, 1780.

---

* Dr. *Sydenham* being upbraided for teaching the cure of the *Lues venerea*, maintained the neceſſity of it, on the principle of Chriſtian charity, which is every where throughout the Scriptures ſtrongly inculcated by divine precept and example. "Tradam quæ in hoc morbo obſervavi atque "expertus ſum: non quo hominum animos de-"teriores efficiam, ſed ut corpora (quod mihi "negotii datum eſt) reddam ſaniora." *Sydenham* Epiſtola ii. reſponſoria.

An early application to medicine is particularly neceſſary in this diſorder, which bears a ſtriking reſemblance, in many reſpects, to *a ſpark of fire*, which is more eaſily extinguiſhed than *a flame* †. An ill timed baſhfulneſs often prevents the having immediate relief.

Stultorum incurata pudor malus ulcera celat. Hor.

† —— *teque his (ait) eripe flammis,* Virg.

The *Lues venerea* was unknown in this country till *Anno Domini* 1492, when it was brought from *Spain* by *Chriſtopher Columbus*.

OF THE
SALIVARY GLANDS;
WITH AN
Explanation of the *Villi* of the Lips, as repreſented in the Frontiſpiece.

"PAROTIS, or *maxillaris ſupe-*
"*rior*, is the largeſt of the
"ſalivary glands; it is ſituated be-
"hind the lower jaw, under the ear;
"its excretory duct paſſes over the
"upper part of the maſſeter muſcle,
"and enters the mouth through the
"buccinator *. This gland has its
"ſaliva promoted by the motions of
"the lower jaw." CHESELDEN.

The *maxillaris inferior*, and the *ſublingualis*, have their excretory ducts;

---

* Near the ſecond or third of the *dentes molares*, at which perforation it diſcharges a very large quantity of its proper fluid into the mouth. This duct is about three fingers breadth long, and of the thickneſs of a wheat ſtraw.

the firſt enters the mouth under the tongue, near the *dentes inciſorii*; the laſt, in ſeveral places near the *molares*, or *grinding teeth*.

The Plate ſhews the outſide of the lips ſtripped of their cuticular coverings. The *villi* (or packets of elongated blood-veſſels, *abſorbents*, and nerves) are here exceedingly long.

" The different veſſels are there
" elongated into proceſſes, which, to
" the naked eye, ſeem, like hairs or
" the pile of velvet, to project from
" this ſurface, and are therefore term-
" ed *villi* by the anatomiſts. Each
" *villus* has its little artery, vein,
" and *abſorbent*; though we cannot
" demonſtrate anatomically, yet the
" colic convinces us ſufficiently, that
" they alſo have nerves. Theſe veſ-
" ſels and nerves are connected by
" cellular membrane, and have alſo
" a kind of cuticular covering."
Cruikſhank, p. 52. 2d edition.

CONTENTS.

A New Method of Cure for the LUES VENEREA.

THE Seat of this Diſeaſe. p. 1

On the internal Uſe of Mercury. p. 4

On the new Mode of introducing Mercury into the Syſtem through the abſorbent Veſſels on the Inſide of the Mouth. p. 9

On the Modus Operandi of Abſorption, taken from Mr. Cruikſkank's *Letter.* p. 19

Further Remarks of Mr. Cruikſhank. p. 26

CONTENTS.

On the Orifices of the Abſorbents, by Mr. Cruikſhank. p. 30

On the external Uſe of Mercury in the Form of Ointment, called Ungt. Mercur. Cærul. p. 34

Venereal Caſes cured by this new Proceſs of Abſorption. p. 47

The Remarks of Dr. Hunter *on Mr.* Clare's *New Method of introducing Mercury into the Circulation.* p. 55

Anſwers to ſome Objections, which have been made to this New Mercurial Proceſs, and were communicated to the Author by a worthy Friend. p. 57

An Eſſay on Abſceſſes, &c.

On the Nature and Formation of Abſceſſes. p. 63

On Suppuration. p. 65

Of opening Abſceſſes. p. 69

CONTENTS.

On the Application of the Cauſtic p. 71

On the Cure of Abſceſſes by Cauſtic. p. 74

Of Digeſtion. p. 78

Of Incarnation. p. 79

Of Cicatrization. p. 87

On the Inoſculation of Wounds; or healing by the Firſt Intention. p. 90

On Sutures. p. 93

Obſervations on the Uſe and Abuſe of the Bougie. p. 95

Obſervations on the Stone in the Kidneys and Bladder. p. 102

On Herniæ. p. 114

Obſervations on the Treatment of Fractures called Compound. p. 120

The Caſe of a Compound Fracture, related by Dr. Hunter *at his Lectures.* p. 129

A NEW

N

L

I
t
c
a

A
NEW METHOD OF CURE
FOR THE
LUES VENEREA.

The Seat of this Diſeaſe.

IT is almoſt univerſally allowed that the *venereal Poiſon* is admitted into the blood, and circulates with the other fluids for ſome time, before it affects the ſolids: therefore, to eradicate this diſeaſe, we muſt introduce *Mercury* into the circulation, by which means, it is preſumed, the poiſon is diſcharged by the Secretory and Excretory, Salivary or Urinary Glands, and by thoſe of the Skin or Inteſ-

tines;

tines; and in this way, it is probable, the venereal taint in the ſolids themſelves is deſtroyed *.

Obſervation induces me to entertain the ſame opinion with many other ſurgeons, that this diſeaſe is in a fair way of cure, when there is a *ſalivary diſcharge or tenderneſs of the gums*, as this circumſtance (which is conſidered by many ſurgeons as the only ſecurity) affords a convincing proof that a conſiderable quantity of the *Mercury* has been abſorbed into the ſyſtem, and that it has powerfully affected the glands †.

---

* Mr. *Plenck* ſays, "All the Secretory Syſtem "poſſeſs *a ſpecifick irritability*, by which means "they are *not* excited into *general action by* "*every ſtimulus*, but only by ſome *particular* "*ones*. This is proved by many obſervations, "and may be taken for a truth. Thus *Can-* "*tharides* more eſpecially ſtimulates the *urinary* "parts and thoſe of generation; *emetics* the "ſtomach; *purgatives*, although injected in the "veins of a dog, or externally applied to the "abdomen of a child, will ſtimulate the inteſ- "tines, and bring on a *Diarrhœa*." See *Plenck* on Mercury, tranſlated by Dr. *Saunders*, p. 110.

At this critical juncture the venereal ſymptoms, tumours, eruptions, or pains, begin to abate, and the Mercury having obtained a viſible influence and ſuperiority over the diſeaſe, the cure is in general ſoon accompliſhed. The firſt object therefore is to procure the admiſſion of *Mercury* into the ſyſtem, and the ſecond is to keep it there.

---

† Dr. *Fordyce* ſays, "Where there is *a little* "*ſoreneſs and heat in the gums*, I ſhould expect "a more ſpeedy cure than where there is none "at all, or where there is a more copious ſaliva- "tion."—*Review of the Venereal Diſeaſe*, p. 100.

It has been generally aſſerted that *Mercury*, by its momentum, breaks the texture of the blood, and in ſo doing that it impoveriſhes the conſtitution. Dr. *Cullen* writes in ſupport of the contrary opinion, p. 443, 4, and 5.

"There is no alteration in the blood during a "ſalivation, and its viſcidity appears then as ſtrong "as at any other time.

On the internal Uſe of Mercury.

SOME gentlemen of the profeſſion prefer internal medicines, others external *mercurial* frictions in the form of ointment. Internal medicines are uſually given in pill or bolus, forms invented for the purpoſe of concealing the nauſeous taſte of certain drugs. As ſome of my patients had great diſlike to both, I gave them the *Mercurius*

" —— After the operation of Mercury is over, " no taint appears in the blood, but on the con- " trary the perſon is in better health than before, " and gives marks of a firmer ſtate of it." p. 449.

Dr. *Boerrhaave* conſidered this diſorder as ſeated in the *membrana adipoſa.* His remedies of courſe tended to deſtroy *all* the *fat*; in which he and his followers were but too ſucceſsful, their patients being often reduced to a hectic ſtate by long and continued courſes of violent purgatives and ſudorifics; a practice too common at this day.

Dr. *Brookes*, in his General Practice of Phyſic, vol. ii. p. 110, ſays, —*Boerrhaave* ſuppoſes, " that a ſalivation will be ineffectual if every drop of fat in the blood is not melted down into water and carried off, and the patient reduced to a death-like paleneſs."

Mercurius dulcis in a few drops of ſyrup, which being diffuſed over the inſide of their mouths and abſorbed, theſe parts became ſoon affected by *the Mercury*, and their complaints were very expeditiouſly and effectually cured. This determined me to make choice in future of theſe ſurfaces rather than the more irritable ones of the ſtomach and inteſtines *.

I had

---

* Dr. *Cullen*, in his Lecture on the Operation of *Mercury*, ſays, " from its *ſtimulus* in the ſtomach " it proves *emetic*, and carried into the inteſtines, " it is *purgative* from the ſame quality; into the " blood *diuretic* and *diaphoretic*, and in ſhort, like " other evacuants, *a very general ſtimulus*." " In " the inteſtines the *ſtimulus* of the mercurial pre- " parations is exerted with greater effect, but ſtill " it is confined to the part, and Mercury acting " in this manner is carried off without any fur- " ther effects on the ſyſtem." p. 450.

" When we purge we commonly think we are " operating on the common ſewer of the ſyſtem: " but little advantage is to be found from Mer- " cury employed in this way, as its virtues depend " chiefly on its operation on the body in gene- " ral." p. 453.

The ingenious Mr. *Cruikſhank*, in his *Letter*, p. 191, ſays, " Though mercurial prepara- " tions

I had formerly given this medicine (Calomel) in pills; I give the ſame medicine now, but in a different, and, I truſt, a much better mode. With the greateſt deference to the candid of the Faculty I muſt beg leave to obſerve, there ſeemed to me no ſufficient reaſon for the ſtrong profeſſional attachment which there has always been in favour of pills, which, how commodious ſoever on other occaſions, do not ſeem well calculated for the

" tions taken into the ſtomach and inteſtines " may frequently be abſorbed from their internal ſurface as well as from any other, yet " from the greater irritability of theſe ſurfaces, " the *ſtimulus* of the Calomel, or of other preparations, is more likely to prove too great; " to produce ſickneſs, griping, and purging, " and to occaſion their being hurled out of the " body before ſufficient time has been allowed " for their abſorption. In this way the remedy " runs a greater riſk of being entirely loſt, and " of producing as little effect on the diſeaſe for " which it was exhibited, as *the Peruvian Bark* " would do on an intermittent, if, inſtead of " ſtaying in the ſtomach, it was conſtantly running off by ſtool."

the conveyance of *Mercury*; ſince, in the firſt place, it muſt be very difficult, not to ſay impoſſible, ſo to diſtribute the *Mercury* that there ſhall not be ſome difference and uncertainty in the doſe, when the maſs is divided into a number of pills; and in the ſecond place, there is the probability of their paſſing through the body undiſſolved *.

In this caſe the *Mercury* can take no effect. When the pills actually diſſolve there, the Mercury vellicates and injures the ſtomach, an organ moſt eſſential to health †.—— When the Mercury is mixed with *Opium* (a very common practice), it does not indeed vellicate the ſtomach, but the Opium injures that organ in particular, and the conſtitution in general *.

---

* "Dr. *Cullen* and others have ſeen pills made of ſo ſtiff a conſiſtence with balſams or gums, as to paſs through the body undiſſolved and unaltered." p. 443.

† "The ſaline chryſtals of the Mercury vellicate and twitch the ſenſible membranes of the ſtomach to that degree, as excites them to an excretion of their contents and glandular juices upwards or downwards, according as the force of irritation is greater or leſs." *Mead* on Poiſonous Minerals, Eſſay iv. p. 109.

This

---

* "How many, originally vigorous, juſtly "deduce their preſent weak bowels and crazy "conſtitutions from the miſchief occaſioned by "the action of Mercury on the *primæ viæ?*" Cruikſhank's Letter, p. 189.

I am not unacquainted with the merits and admirable effects of *Opium* in many painful and deſperate diſeaſes, yet its ſtrongeſt advocates will allow it is apt to produce the ſame miſchievous effects on the habit as the drinking ſpirituous liquors, viz. *Tremors*, *Vertigo*, *Sickneſs*, and *Aſthma*, which are great objections to its being uſed daily in practice in venereal caſes. The deſign of joining *Opium* to *Mercury*, is to hinder the *Mercury* from paſſing off by ſtool; and every ſurgeon ſees the neceſſity of preventing its purging, which is effected by the proceſs here recommended, without the help of *Opium*, and the *Mercury* is kept (where it ought to be) in the ſyſtem, there to act in full force on the diſeaſe.

Mr. *Cruikſhank* obſerves, p. 189, head the 4th, "There are however ſome preparations of *Mercury* which may be taken into the ſtomach with- "out irritating too much, provided *Opium* is ex- "hibited along with them; but there are many "conſtitutions which will not bear *Opium*; and "if

This well known fact has excited univerſal complaint and dread of the pernicious operation of *Mercury*; now *Mercury* being adminiſtered in this new method is ſo mild, that *Opium* is not wanted, and the objections abovementioned are entirely obviated.

On the new Mode of introducing Mercury into the Syſtem through the abſorbent Veſſels on the Inſide of the Mouth.

THERE have been ſo many inſtances obſerved by ſurgeons where the mouth has been *unexpectedly* made ſore, and a ſalivation raiſed, by the application of red precipitate, and other *mercurial* powders, to a ſore, (that is, to a part not covered with the

---

" if Mercury cannot be exhibited properly without " it, patients poſſeſſed of ſuch conſtitutions muſt " be extremely unfortunate, eſpecially if to the " former peculiarity of habit is joined another, " *viz.* an antipathy in the ſkin to every thing " oily."

the external ſkin), that every ſurgeon muſt admit the abſorption of mercurial powder into the blood; was it not then reaſonable to ſuppoſe mercurial powder might be abſorbed when applied *to the thin cuticular and inner ſurfaces of the body* *?

---

* It is now generally allowed that every ſurface in the body, every cell, abſorbs. Water lodged in the cellular membrane (fat) of the body, in dropſical patients, is frequently abſorbed. So is blood, when extravaſated into the ſame cells. An *Ecchymoſis* (or what is commonly called, a bruiſed or a black eye) affords a very familiar inſtance of abſorption.—The ſkin of the eyelids at firſt appears very black; as the abſorption takes place, this becomes gradually yellow, and at length totally diſappears.

The rubbing the body with a wet towel allays thirſt, and the linen ſoon becomes dry from the abſorption produced by the friction.—*Glyſters* are well known to be abſorbed.—An hoſpital patient, who had cut her throat, and wounded both the *trachea arteria* and *œſophagus*, ſo that the food came out at the wound, was nouriſhed more than a fortnight by *glyſters*, the nutritious parts being abſorbed into the blood by the lacteals, the abſorbent veſſels of the inteſtines. She committed violence on the wound, notwithſtanding the utmoſt care was taken, and ſhe died.

My experience tells me that abſorption here takes place, ſince the proper and powerful effects of *Mercury* on the mouth have been produced, and the *Lues venerea* cured, by my patients rubbing, with their finger moiſtened with *ſaliva*, three or four grains of *calomel*, at intervals in the courſe of the day, (a grain at a time), on the inſide of the cheek, on and around that place, where the *parotid (ſalivary) duct* opens into the mouth.

In order to prevent the inconvenience that might ariſe from ſwallowing the powder, I have directed patients to apply the *calomel* principally to the lips, parts well able to bear gentle friction, as are alſo the external ſurfaces of the *gums*; little or none of the *Mercury* can then be ſwallowed, but the whole will be abſorbed in the firſt inſtance.

Should practitioners think that the mere ſurface of the lips is too ſmall to admit the abſorption of a ſufficient quantity, the inſide of the mouth may be alſo employed. The frequent rubbing of a little calomel on a ſmall ſurface, anſwers better than a greater quantity at once on a larger; this may be repeated as often as the urgency of the caſe requires, and until the mouth feels the influence of the *Mercury*.

It may be applied by half a grain or one grain at intervals. The patient ſhould always ſwallow, or ſpit out, the ſaliva before he begins to make uſe of the powder, otherwiſe the friction may cauſe too great an accumulation of that fluid. He ſhould alſo abſtain from drinking half an hour or longer after this operation, that the powder may not be conveyed into the ſtomach, and that proper time may be allowed for its abſorption *.

It may perhaps be ſaid, that the mercurial powder paſſes into the ſtomach, and, without any abſorption from the mouth, effects the cure in the uſual way. Even if this was the caſe, *the patient would more certainly be cured, than if he took this medicine in pills*, ſince theſe may paſs through the body undiſſolved; but thoſe who uſe the powder in the manner here recommended, refrain from ſwallowing the ſaliva *till the abſorption is effected.* The ſaliva mixing with the *Calomel* corrects its ſtimulating quality, and ſix or eight grains of this preparation will often produce leſs purgative effect than two grains in a pill; a fortunate circumſtance ſurely for many patients *.

---

* Mr. *Cruikſhank* obſerves, "that the abſorbents take up ſolids as well as fluids. From *Du Hamel*'s experiments in feeding animals with *madder* it appears, that ſuch parts of the cartilages as were then oſſifying became red: this powder is at firſt abſorbed from the inteſtines by the *lacteals*, and afterwards depoſited in the bones by the *arteries*. From the ſame experiments it appears, that on leaving off the uſe of the *madder*, the bones of thoſe birds which had been fed with it, and which hitherto appeared as red as ſcarlet, even through the living ſkin, in a few months became perfectly white again. From this circumſtance we muſt infer that the earth of bones is abſorbed, and that the bones themſelves are perpetually changing." P. 37.

---

* Mr. *Plenck* ſays, " A ſimple *mucilage* (or *ſaliva*) deſtroys the *ſpecific ſtimulus of Mercury*; " while at the ſame time its *antivenereal virtues* " are preſerved.——*Mercury* extinguiſhed by *mucus* paſſes more eaſily into the blood (either by " the *primæ viæ*, or when externally applied) " than *crude Mercury* not extinguiſhed."

" *Mercury* has leſs affinity with *fat* than with " *mucus*. Hence frequently when *Mercury* is " united with *fat* † it makes its eſcape from it in " the body, and takes its courſe to the *glands* of " the throat, or other *glands*. p. 118. On the " other hand, when *Mercury* is extinguiſhed by " *mucus*, it readily mixes with all the fluids of " our body, and therefore ſafely circulates with " them

† As in the mercurial ointment.

The reader muſt not ſuppoſe that I mean in general to raiſe *a ſalivation*, or that the *venereal virus* paſſes off more ſpeedily from the increaſed flow of ſaliva, than from an affection of the other ‡ ſecretions; yet the quantity

---

" them through all the vaſcular ſyſtem, and is " equally diſtributed over the whole. p. 119. " How *Mercury* acts on the *venereal virus* in de- " ſtroying it, no perſon can determine, unleſs the " nature of this *virus* was perfectly known." p. 120.

Though neither the *virus* nor its antidote are diſcoverable in the blood when analyſed, yet we have the greateſt reaſon to believe, from certain effects, that they are both conveyed thither.

I ſhall conclude this extract with adopting the words and ſentiments of Mr. *Plenck*, who ſays, " What I have advanced concerning the theory " of ſalivation, I mean to be ſubmitted to the " judgment of eminent men as hypothetical; " and it will afford me pleaſure, if any one will " find out and demonſtrate a better theory con- " cerning the wonderful action of Mercury," p. 120;—to which I may add, and a more ſalutary and better mode of practice.

‡ I have known the other ſecretions, as well as the ſalivary, often and greatly affected by this proceſs. The Mercury acts powerfully as a diaphoretic and a diuretic, which circumſtance brought

tity of *Mercury*, which appears to me to be neceſſary to ſtop the progreſs of the diſeaſe, and to facilitate the cure, in many conſtitutions will have this effect. The *ſalivation*, however, (when it does happen) is ſo gentle, that patients have ſeldom been put to much inconvenience, or neceſſarily confined to the houſe; and it was hardly to be diſcovered, when they were careful to conceal it. Many took the *Mercury* in very large quantities without being *ſalivated* at all, and were equally well cured. It is better however,

---

to my mind what Dr. *Hunter* has aſſerted in his Lecture on the Circulation of the Blood. "Make "an orifice, and inject a fluid of a purgative qua- "lity, a diuretic, or any other, and it ſhall affect "the particular gland accordingly; that is, purge, "vomit, ſalivate, go off by urine, &c. according "to its nature."

Having been informed that theſe experiments were made by Mr. *John Hunter*, I take occaſion to mention it in this place, as I ſhould be ſorry even to be ſuſpected of omitting intentionally the recital of any thing redounding to the credit of this celebrated ſurgeon.

however, upon the whole, to run the riſk of a ſlight *ptyaliſm*, or a tenderneſs of the gums, (which equally ſhews the *Mercury* to be in the ſyſtem), than not to throw in a ſufficient quantity of the medicine. The rapidity with which venereal ſores uſually mend when the mouth and gums become inflamed, even in a ſlight degree, confirm me in this ſafe and neceſſary practice; and the continuing the mouth tender till the ſores are entirely healed, and all *hardneſs of the ſkin* (the true criterion of *virus*) is removed, is, in my opinion, the only effectual method to prevent the venereal fire from rekindling.——In no one inſtance where I raiſed a ſalivation, was there any thing more than an inflammation, or ſometimes excoriation, on the inſide of the mouth; but none of thoſe deep ulcers ſo common in other ſalivations. One or two grains of Calomel applied behind the *preputium*, or to the *labia*, will ſometimes occaſion the fetid breath and a ſlight ſalivary evacuation, and, joined to the other proceſs, will greatly advance the cure, not as a topical application, but by abſorption into the * ſyſtem.

On

---

* It may be uſed twice or thrice a day, a little at a time, ſcattered thinly on the part, or moiſtened with ſaliva. It will act alſo as a preſervative againſt venereal infection, perhaps better than ſome noſtrums advertiſed for this purpoſe.

" It is now generally allowed that ſalivation is
" not neceſſary to the cure of the venereal diſ-
" eaſe, that the conſtitution is frequently impair-
" ed by it, that it expoſes the patients to many
" inconveniencies, and that it limits us in em-
" ploying the neceſſary quantity of Mercury,
" which is evacuated too early, and before the
" cure can be effected: beſides, inſtances occur
" every day in practice, where the diſeaſe has
" been ſucceſsfully treated by an alterative courſe
" of Mercury, after repeated ſalivations had
" proved ineffectual. In my opinion, we may
" with equal propriety ſay, that *bliſters* cannot
" prove uſeful in the cure of *fevers*, or topical
" inflammations, without producing a *ſtrangury*,
" as

On the Modus Operandi of Abſorption, taken from Mr. *Cruikſhank*'s Letter, p. 133.

HE ſays, “ I think it not improbable that *Abſorption* may “ begin ſomewhat in the following “ way:

“ as to ſay *Mercury* cannot cure the venereal diſeaſe “ without producing *ſalivation*; and the free uſe “ of gum arabic, and other mucilages, corrects “ the inflammatory acrimony of both upon the “ ſame principles.” See Dr. *Saunders*'s Appendix to *Plenck*, p. 133, 4.

The ſame author ſays, “ from pathology we “ learn, that *five poſtulata* are required before the “ venereal *virus* can be perfectly deſtroyed by “ *Mercury*. 1ſt, That ſo much *Mercury* be “ taken into the body, as is neceſſary for overcoming and deſtroying the venereal *virus* that “ exiſts in it. 2dly, That the *Mercury* flows “ freely through all the ſmall veſſels of our ſyſtem. 3dly, That it impregnates every particle of our fluids. 4thly, That it remains united “ with our fluids for ſome length of time, and “ frequently circulates with them. 5thly, That “ at laſt the *virus* along with the *Mercury* be “ conveniently evacuated by natural excretions.” The ſame author obſerves, that “ a *ſalivation* is very

" way : The abſorbents have fibrous
" coats, are irritable and muſcular :
" muſcular

very *inconvenient*, is *dangerous*, does not give a *certain cure*, is not *critical*, nor can it be excited in every ſubject, nor is it neceſſary in any. Its inconveniencies are obvious, its danger evident, for, as *Aſtruc* atteſts, violent *Fevers*, *Diarrhœas*, *Dyſentery*, *Hæmoptoe*, &c. &c. often ſupervene; nor is it neceſſary for the cure, as many people who have been violently diſtempered have been cured thoroughly without ſalivation. And *Mercury*, together with the venereal *virus*, may be more conveniently and eaſily evacuated by the ordinary excretions of *ſweat*, *ſtool*, and *urine*." p. 101.

Dr. *Fordyce* obſerves, p. 100, " Formerly phyſicians were exceedingly ſolicitous to raiſe the *ſalivation* to the utmoſt height, leſt they ſhould not be certain of the cure without it; of late they have been contented with ſweating or plentiful diſcharges of urine. Now many are ſatisfied, if they uſe a given quantity, whether it affects the *ſalivary* glands, or goes off either by *perſpiration* or *urine*. I am diſpoſed to be of the laſt number, with this difference, that *where there is a little ſoreneſs and heat in the gums*, I ſhould expect a more ſpeedy cure, than where there is none at all, or where there is a more copious ſalivation."

Mr. *Cruikſhank* ſays, " I have ſeldom found " that patients were perfectly ſafe from a relapſe, " who were cured without ſome conſiderable " affection of the mouth." p. 229.

Dr. *Smith*

" muſcular parts in general ſtimulated contract, and having contracted, if in a ſound ſtate, muſt from their own nature be preſently relaxed: whatever is to be abſorbed, is applied to the abſorbing ſurfaces, either by the preſſure of the external atmoſphere; by the periſtaltic motion of the ſtomach and inteſtines; by the motions of reſpiration, pulſation of neighbouring arteries, or, in ſhort, by the contraction of muſcular parts in general.

" This matter coming into contact with the orifice of an abſorbent, " ſtimulates

---

Dr. *Smith* ſays, " In a ſecond infection or pox, " Mercury and its preparations are the medicines " that are moſt to be depended upon. It has been " the general practice to preſcribe mercurials in " ſuch a manner as to excite a ſalivation; but " from experience it has been found, that a ſalivation is by no means neceſſary to the cure of " venereal ſymptoms; as many very bad caſes " have been relieved by mercurials given as alteratives, when the mouth has not been at all " affected." *Formulæ Medicamentorum*, p. 139.

" ſtimulates it; the firſt effect of " this ſtimulus is to make it con- " tract; it of courſe takes up leſs " ſpace, and the fluid, or whatever it " is, ruſhes forward; the abſorbent " orifice now dilating, forms a va- " cuum, the fluid muſt therefore ruſh " in, and ſtimulating it a ſecond time, " obliges it to contract. This con- " traction not only propels what has " entered the abſorbent, but makes " room for a freſh quantity to come " forward; and in this way, perhaps, " is the matter to be abſorbed taken " up from ſurfaces.

" Mr. *Hunter* is diſpoſed to conſider " the abſorbent veſſel in the light of a " living animal, and thinks it may " take up fluids or ſolids as a leech, " for example, or a caterpillar, take " up their food."

Mr. *Cruikſhank* ſays,

1ſt, " That *Calomel* rubbed on the " inſide of the mouth may be ab-

" ſorbed, appears probable from ana-
" logy.

2dly, " The ſurface on which you
" propoſe the *Calomel* ſhall be rubbed,
" is in its own nature a better ab-
" ſorbing ſurface than perhaps any
" other acceſſible to friction in the
" body.

3dly, " The abſorption of *Calomel*
" from the inſide of the mouth, in
" your method, appears, from the
" teſtimony of many of your pa-
" tients, undeniable *.

4thly, " If

---

* " If your patients rub three grains of Ca-
" lomel every day on the inſide of the mouth,
" and it does not gripe or purge; and if the
" common effect of three grains, taken into the
" ſtomach, is, that it certainly gripes and purges;
" then we muſt conclude that the three grains
" given in your way, have not gone into the
" ſtomach; whilſt their producing evident effects
" on the diſeaſe, for which they were exhibited,
" ſhews that they have certainly got into the
" habit; or, in other words, that they have
" been abſorbed by the ſurface to which they
" have been applied."—A patient of mine told
Mr. *Cruikſhank* he had taken eight grains at a doſe
repeatedly,

4thly, " If *Calomel* can be abſorbed
" in your way, it muſt be the moſt
" eligible method, becauſe it is leſs
" apt to irritate the ſtomach and
" inteſtines, and by purging to de-
" ſtroy its proper effect, than it
" would be if its firſt action was to
" be immediately on theſe parts †.

5thly,

---

repeatedly, without being ſick, griped, or purged. —— " On what other ſuppoſition," adds Mr. *Cruikſhank*, " ſhall we be able to ſay, why theſe " eight grains did not purge, &c. but that being " abſorbed from the mouth they became milder " in their operation, in the ſame way as we know " the divided quickſilver becomes milder when " abſorbed by the ſkin." p. 187, 8.

Mr. *Cruikſhank*, for experiment's ſake, took three grains of Calomel in a pill, with conſerve of hips, and ſwallowed it at once. In ſix hours after it griped him ſeverely and purged. He rubbed three grains on the inſide of his mouth, and repeated it three different times. After waiting twenty-eight hours, he found not the leaſt inconvenience from the friction, but only a glow on his gums and cheeks, and a braſſy taſte in his mouth. *Cruikſhank*'s Letter to *Clare*, p. 231.

† " The *Calomel* will here be mixed with the " ſaliva during the friction, will be diffuſed over " the whole mouth, and abſorbed from the inſide " of

5thly, " Your friction of *calomel* " is a leſs tedious, leſs laborious pro" ceſs than the common one of rub" bing mercurial ointment.

6thly, " Your method alſo recom" mends itſelf as a neater and more " convenient one than the rubbing " mercurial ointment.

7thly, " Your method is better, *cæte" ris paribus*, than the common modes " of exhibiting *Mercury* internally, " inaſmuch as it employs friction.

8thly, " Your method appears pre" ferable to the rubbing mercurial " ointment, inaſmuch as watery flu" ids may be preſumed to be more " readily abſorbed than oils, have not " ſome of the diſagreeable qualities

---

" of the lips, ſurfaces of the tongue, roof of the " mouth and fauces, as well as of the cheeks; " thus its firſt effects will not be in the way of " ſtimulus on the *primæ viæ*, but it will be " gradually and equally applied to the general " ſyſtem." *Cruikſhank*'s Letter, p. 192.

" of oils, and that there are ſome " reaſons to believe that *Saliva* and " *Mercury* make a more efficacious " compound than *Mercury* and *Oil.*

9thly, " Your method of rubbing " *Calomel* looks as if it would be a " more expeditious way of giving " the mercurial ſtimulus to the ſyſ- " tem, and of eradicating the vene- " real *virus.*

10thly, " My experiments, as far " as they go, confirm your practice."

Further Remarks of Mr. Cruikſhank.

" *The particles of the blood* ſeen in " the ſimple microſcope are ten times " larger than thoſe of *levigated Calo-* " *mel*, yet I have had many opportu- " nities of ſeeing the *Abſorbents* tur- " gid with red blood. The *particles* " *of Quickſilver* in the beſt prepared " mercurial ointment are in the ſame " microſcope as diſtinct as the parti-

“ cles of the blood; and we all know they are very readily taken up by the *abſorbents* of the ſkin. A porter, for example, is engaged for two or three days in rubbing down quickſilver with hog's lard in a mortar; he works the peſtle, the upper end is every now and then ſmeared with a little of the ointment; he gets *fetid breath* and *ſore gums*, (the ordinary effect of mercurial friction), which ſhews that abſorption from the extraordinary *ſtimulus* had taken place from one of the thickeſt cuticular ſurfaces, the palms of his hands. Though abſorption may thus take place from ſuch a ſurface, yet in general the thinner the cuticular ſurface is, the cloſer will the matter to be abſorbed be applied to the mouths and coats of the abſorbents, and ſtimulating them more readily, will be ſooner

“ abſorbed. Thus *venereal matter* “ applied under the *prepuce* in men, “ or on the inſide of the *labium* in “ women, gets ſooner into the *inguinal* glands, ſooner into the habit, “ than if it had been applied to the “ outſide of either parts.” p. 184. 2d Edition.

“ If the *poiſon* makes its way more “ quickly from an inſide or thin cuticular ſurface, why ſhould not its “ *antidote* do the ſame thing? why “ ſhould not *Mercury* get ſooner into “ the habit from the *inſide* of *the* “ *mouth*, than from the *outſide of the* “ *thigh?*” p. 186. 2d Edition.

“ A little child, in her maid’s arms, “ received a kiſs from a girl of the “ town, who accidentally paſſed by. “ *The cuticular covering is remarkably* “ *thin on the edge of the lips*, and “ allowing the blood to appear more “ readily through it, gives them their

“ greater redneſs. A *chancre* on the “ projecting part of the under lip “ was the conſequence of this ſalute, “ which in a few days made its appearance, and reſiſted every application for a fortnight or more. At “ laſt it yielded to *Mercury*; and “ thus ſhewing itſelf to be venereal, “ recalled the circumſtance of the “ kiſs, which but for this had paſſed “ unnoticed. Had the venereal matter been applied to the cheek externally, it is probable, from what “ we ſee daily, that it might have “ lain ſome time without producing “ any effect, and at laſt have been “ wiped off; or at leaſt that it would “ not have produced a *chancre* ſooner “ than in a fortnight, or perhaps ſix “ weeks.” p. 184.

On the Orifices of the Abſorbents, by Mr. CRUIKSHANK.

"HAVING ſet out with the idea that *the human Abſorbents* took up *Mercury* in the form of *a fine powder*, ſome account of their *orifices* will alſo be expected. This unavoidably leads me into a very curious and extenſive field. Almoſt all the anatomiſts hitherto have been perſuaded, that theſe orifices were too minute to be viſible even in the microſcope; that this minuteneſs of their orifices anſwered a very good purpoſe, and ſerved as a guard on the conſtitution, to prevent any thing coarſe from entering the blood. Whoever ſets out in ſearch of theſe orifices, will moſt naturally be led to the internal ſurface of the inteſtines. He muſt perceive that his probability of ſucceſs will be greater on that ſurface than any where elſe in the body. The different veſſels are there elongated into proceſſes, which to the naked eye ſeem, like hairs, or the pile of velvet, to project from this ſurface, and are therefore termed *villi* by the anatomiſts. *Each villus* has its little *artery*, *vein*, and *abſorbent*; though we cannot demonſtrate anatomically, yet the colic convinces us ſufficiently, that they alſo have *nerves*. Theſe veſſels and nerves are connected by cellular membrane, and have alſo a kind of cuticular covering.

" Though I had frequently looked for them, I never ſaw any thing like *the orifices of the lacteals*. At laſt, about a year and half ago, a very favourable opportunity of inveſtigating theſe orifices preſented itſelf. A woman had died ſuddenly about four in the morning, after having been in pretty good health on the preceding evening. Her relations wiſhed to know the cauſe of ſo ſudden death, and the body was opened. *The lacteals*, on the outſide of the inteſtines, and along the *meſentery*, were more turgid with a firm coagulated *chyle* than I had ever ſeen them. They were alſo in proportion more numerous, and gave an idea of their being at leaſt equal in number to either arteries or veins. The meſenteric glands, inſtead of putting on their uſual reddiſh appearance, were, from the quantity of *chyle* they contained, perfectly white. When the inteſtine was opened, there appeared a number of white points up and down its internal ſurface; in ſome places they were crouded together, but in general ſcattered. Theſe points, on cloſer inſpection, would have made one ſuppoſe that each villus was a veſicle turgid with *chyle*. The arteries and veins were ſo compreſſed from the diſtenſion of the extremity of the *lacteal* by the *chyle*, that the whole *villus* ſeemed to belong to the *lacteal*. Though other *villi* were not equally white or diſtended, I afterwards found they all contained *chyle*. In a portion of this inteſtine ſubjected to the microſcope in a ſtrong light, I ſaw diſtinctly a number of pores on the tops and ſides of thoſe *villi*. I was convinced they were *the abſorbent orifices of the lacteals*. They appeared to be in a kind of bulbous extremities of thoſe veſſels, and their diameters, as I had often ſuppoſed *à priori*, were in reality ſeveral times larger than thoſe of the particles of the blood, ſeen under the ſame microſcope. I had a drawing made of ſome of the more diſtinct turgid *villi*, and of *theſe abſorbent orifices*. Dr. *Hunter*, Dr. *John Jebb*, and ſeveral of my anatomical friends, were occaſionally preſent, ſaw their appearances, and appeared to be ſatisfied; nor can I ſuppoſe that I was deceived. The reaſon probably of my ſucceſs here was, that the *chyle* coagulates in the dead body, and gives that erection or diſtenſion to the *villi* which they had when under the *ſtimulus of abſorbing*. Without this they collapſe, particularly in the dead body, and the orifices become inviſible." Letter, p. 55.

On the external Uſe of Mercury in the Form of Ointment, called Ungt. Mercur. Cærul.

IT is hardly neceſſary to point out the diſagreeable circumſtances attending the application of this remedy. It is not only dirty, but exceedingly offenſive by reaſon of its ſmell, and very uncertain and miſchievous in its effects *. The external ſkin is a ſurface by no means calculated for abſorption, ſince it is denſe, and

---

* Dr. *Cullen* obſerves, that " purging is never " excited by any means without ſpaſms of the " inteſtines,

" inteſtines, which, when the operation is con-
" tinued, are apt to end in durable ſpaſm and
" inflammation: theſe are attended with very
" dangerous conſequences." On *Mercury*, p. 453.
—The Doctor adds, " Neither does the method
" of *purging by unction* anſwer much better, (al-
" though perhaps more effectual) becauſe it is
" attended with very great pain." To which may be added, that bloody, dyſenteric and *fatal* fluxes are ſometimes the conſequences of mercurial ointment too liberally employed.

Dr. *Mead*, p. 104, ſays, " he remembers to
" have once found ſome *Mercury in the perinæum*
" of a ſubject taken from the gallows for a diſſec-
" tion, (whoſe rotten bones diſcovered what
" diſeaſe had required the uſe of it, and that, I
" ſuppoſe, by *unction)* without any marks of cor-
" roſion of the part where it was collected."

As it has been a queſtion much agitated of late, how long Mercury is ſuppoſed to continue in the ſyſtem after a ſalivation, the reader is preſented with the ſentiments of Dr. *Mead* on that head.—
" Experience has convinced us that repeated doſes
" of crude *Mercury* have in ſome caſes, even a
" conſiderable time after they have been taken,
" exerted their force, and thrown the body into
" unexpected diſorders.

" I remember two accidents of this kind, (and
" one of them proved fatal), in which, when
" ſmall

and conſequently often impenetrable. This ointment generally inflames the

ſkin,

“ ſmall quantities had been given for many days
“ together, a violent ſalivation enſued more than
“ two months after the uſe of it had been left
“ off.

“ And not long ſince I ſaw a young lady, who
“ having ſwallowed about ſix drachms every
“ morning, three ſucceſſive days, was ſalivated
“ three weeks. The flux then ceaſed, but re-
“ turned after ſix months, and held a month;
“ and once more came on, in the ſame manner,
“ two months after. The breath was each time
“ ſtrongly affected, as is uſual in mercurial ſpit-
“ tings. So ſurpriſingly active is this mineral,
“ even ſimple and uncompounded.” Dr. *Mead*,
Eſſay iv. on poiſonous Minerals, p. 106.

A celebrated anatomiſt remarked in his lectures, that he has ſeen mercurial globules on the internal ſurface of the inteſtines: this, he ſays, will account for thoſe unexpected returns of ſalivations at diſtant periods.——The quickſilver being put into motion by any accidental irritation, no wonder it ſhould be reabſorbed, and ſtimulate the ſalivary ſyſtem afreſh.

Dr. *Fordyce* ſays, p. 103. “ I know at this mo-
“ ment an old patient of mine who has returns
“ of the ſalivation, that laſt for weeks together,
“ accompanied with a *braſſy taſte in his mouth*, as
“ if he was under a courſe of Mercury, though

“ it

ſkin, and occaſions delay by a temporary diſcontinuance on that account; ſometimes it will affect the mouth, ſometimes it will not; nor, indeed, (as far as we can diſcover) any of the other ſecretions; for which reaſon no certain dependance can be placed upon it.

Mr. *Cruikſhank* obſerves, p. 202. "That the friction of Calomel is a "leſs tedious, leſs laborious proceſs, "than the common one of rubbing mercurial ointment."——He adds; "To be obliged to rub with "their own hands half a dram of "mercurial ointment, for half an "hour every night, is a labour

---

"it is now above twelve years ſince he has uſed "any in whatever ſhape."

In general it muſt be admitted that Mercury being very *loco-motive*, eſcapes ſoon from the ſyſtem, ſometimes indeed ſooner than, for the ſecurity of our patients, we could wiſh.——It is a fact, that conſtitutions broken down by dram-drinking, or other exceſſes, are immediately and violently affected by very ſmall quantities of Mercury.

“ only to be conceived by thoſe who
“ have experienced it. Nothing is
“ more univerſally complained of.
“ What muſt it be when half an
“ ounce, or even an whole ounce, is
“ rubbed? The proceſs, in ſhort, frequently
“ tires the patient ſo much
“ that he gives it over before it is
“ half performed, and ſometimes
“ omits it when it ought to have
“ been done. It requires conſiderable
“ force; and if the patient is very
“ weak, will, to him, be labour in
“ vain. I am perſuaded that patients
“ frequently fail of being cured from
“ theſe very circumſtances. Let us
“ ſuppoſe fifteen grains of mercurial
“ ointment equal in effect to one
“ grain of Calomel. This calculation,
“ I preſume, will not be thought
“ unfair by thoſe who have given
“ both quantities on different occaſions
“ to venereal patients; and have

" obſerved that they could go on with " the Calomel for twelve or fifteen " days, ſenſibly gaining on the diſ- " eaſe; whereas, when the ointment " was employed, it became neceſſary, " long before the end of this period, " to increaſe the doſe, in order to " keep up the firſt effects. If a pa- " tient then muſt either rub fifteen " grains of common mercurial oint- " ment, or rub a grain of Calomel, " and is allowed, after trying both " ways, to chooſe for himſelf, there " will be little doubt with reſpect to " his choice. For though all ſurfaces " abſorb, and any ſurface may be ſti- " mulated to abſorb more than it " commonly does; yet, in general, " ſurfaces ſeem to tire, (if one might " ſay ſo), and, like muſcles, having " performed a certain quantity of " work, refuſe to do more. At leaſt " we find by experience, that mercu-

"rial ointment is taken up more "quickly by the abſorbents from "diffuſing it over a large ſurface, or "by changing ſurfaces. Mercurial "ointment of courſe being more "bulky and more viſcid than Calomel and ſaliva, will require a larger "ſurface and a longer time before it "can be ſufficiently rubbed, or, in "the common ſtyle, before it can be "rubbed in. Now if, according to "my calculation, three grains of Calomel have as great an effect on the "venereal *virus* as forty-five grains "of mercurial ointment, and if it "would require half an hour's ſtrong "friction to make theſe forty-five "grains be abſorbed from the "whole inſide of the thigh, while "three grains of Calomel gently "rubbed on the inſide of the mouth "may be abſorbed in half an hour, "or, though it ſhould not be abſorbed

" ſorbed in twelve hours, ſtill, if it
" is attended with no trouble to the
" patient, who does not perceive the
" advantage of employing Calomel
" rather than mercurial ointment.

" The friction of mercurial oint-
" ment on the thighs or arms, is to
" many people one of the moſt diſa-
" greeable things in the world. Its
" leaden colour, contraſted with the
" ſkin, makes it look dirty. It has a
" particularly offenſive ſmell, inde-
" pendent of that of the turpentine
" or balſam of ſulphur, which may
" have been employed in extinguiſh-
" ing the quickſilver. From the cir-
" cumſtance that half an hour's fric-
" tion, or even a whole hour's fric-
" tion, if ever ſo well performed,
" will not commonly effect a total
" abſorption of the ointment, the ſkin
" is generally left a little ſmeared
" with it, after the proceſs is over;

“ as it is oily, it does not evaporate,
“ or dry readily, and will eaſily ſtick
“ to whatever it touches. Patients
“ are obliged to ſleep in flannel drawers
“ to prevent the ointment from
“ getting through, and daubing the
“ bed clothes. They muſt be frequently
“ changing theſe drawers;
“ conſtantly waſhing the ſkin; or, as
“ waſhing off the ointment would retard
“ rather than forward the cure,
“ they muſt remain dirty for ſix
“ weeks, or perhaps three months together;
“ and if by accident any part
“ of the ointment gets upon their
“ linen, from its colour it is very apt
“ to give the alarm in families, and
“ lead to diſagreeable diſcoveries.”

Mr. *Cruikſhank* ſays, p. 144. “ It
“ had been doubted, *whether the abſorbents
“ would take up ſalts*, or very
“ ſtimulating ſubſtances; we find,
“ however, they certainly do.

" If *corroſive ſublimate*, thrown into " the ſtomach, with a view to cure " the venereal diſeaſe, was not *abſorbed* by the *lacteals*, how ſhould it " produce *a ſalivation?* The change " it afterwards undergoes in the " body, in becoming *quickſilver*, is " moſt probably produced in the blood " veſſels.

" Dr. *Hunter* gives a remarkable " caſe of ſome workmen employed to " clean a mineral water well. They " had for this purpoſe thrown off " their ſhoes and ſtockings, and gone " into the well. The ſalts in the " water were abſorbed by the abſorbents of the feet, and purged them " all violently. I know this has been " attributed to the coldneſs of the " well. Cold applied to the feet may " have this effect; but it is difficult " to ſuppoſe, that a number of workmen accuſtomed to ſuch employ-

" ments, ſhould in this inſtance be " violently purged merely from the " coldneſs of the well." Mr. *Cruikſhank*'s Letter to Mr. *Clare*, p. 144.

The reader is preſented with the following extract reſpecting abſorption, from Captain *Kennedy*'s Narrative of his voyage and diſtreſſes at ſea, publiſhed in *Dodſley*'s Annual Regiſter, for the year 1769. 2d edit. p. 191.

The captain ſays, " On the fifth " day after our arrival at *Ambergris*, " we happily diſcovered a ſmall veſſel " at ſome diſtance, under ſail, which " we made for; in the evening got " on board her, and in a few hours, " being the 10th of *January*, we " arrived on *St. George*'s quay, in a " very languid ſtate. I cannot conclude without making mention of " the great advantage I received from " ſoaking my clothes twice a day in " ſalt water, and putting them on

" without wringing. It was a conſiderable time before I could make the people comply with this meaſure, though, from ſeeing the good effects it produced, they, of their own accord, practiſed it twice a day. To this diſcovery I may with juſtice impute the preſervation of my own life, and that of ſix other perſons, who muſt have periſhed but for its being put in uſe. The hint was firſt communicated to me from the peruſal of a treatiſe written by Dr. *Lind*, and which, I think, ought to be commonly underſtood, and recommended to all ſeafaring people. There is one very remarkable circumſtance, and worthy of notice, which was, that we daily made *the ſame quantity of urine as if we had drank moderately of any liquid*, which muſt be owing to a body of water being *abſorbed*

" through the pores of the ſkin. *The*
" *ſaline particles remaining in our*
" *clothing became encruſted by the heat*
" *of our bodies and that of the ſun,*
" which cut and wounded our poſte-
" riors, and, from the intenſe pain,
" rendered ſitting very diſagreeable.
" But we found, upon waſhing out
" the ſaline particles, and frequently
" wetting our clothes without wring-
" ing, which we practiſed twice a day,
" the ſkin became well in a ſhort
" time; and ſo very great advantage
" did we derive from this practice,
" that the violent drought went off,
" the parched tongue was cured in a
" few minutes after bathing and
" waſhing our clothes; at the ſame
" time we found ourſelves as much
" refreſhed as if we had received
" ſome actual nouriſhment."

The writer adds the following query, " Whether bathing in ſalt wa-
" ter

“ ter would not be of infinite ſervice
“ in hot burning fevers, and break
“ the too great adheſion of the blood,
“ which is the cauſe of inflammatory
“ fevers. It is to be remarked, that the
“ four perſons who died in the boat
“ drank large quantities of ſalt water,
“ and they all died delirious; but
“ thoſe who avoided drinking it had
“ no ſuch ſymptoms *.”

VENEREAL CASES

Cured by this new Proceſs of Abſorption.

CASE the FIRST.

A. B. came to me with a large chancre upon the prepuce, which had been there almoſt two months; he had alſo a bubo in each groin, one of which was in a ſtate of *ſuppuration*, the other indurated. I gave him the *Calomel*, three grains every night, and two in the morning; it neither griped nor purged; the third day his mouth became ſore; in four or five days after employing this mercurial friction, the ſore put on a fine florid aſpect, and had a white edge; the buboes began rapidly to diſperſe *. I continued the *Calomel* in ſmaller doſes, ſo as to keep up the tenderneſs of the mouth for three weeks, by which time the chancre was completely healed. I ſhould now have deſiſted from the *Mercury*, being perfectly ſatisfied with what I had done; but Dr. *Hunter*, who was conſulted upon this caſe, adviſed the continuing *Mercury* a fortnight longer, leſt he ſhould relapſe. I continued it at intervals for this period *. He has remained well ever ſince. Mr. *Maxwell* the apothecary alſo frequently ſaw this patient while he was under cure, and knows the circumſtances to be as they are now related.

---

* Whether ſalt is abſorbed or not by the abſorbents of the external ſkin, is left to the conſideration and deciſion of the profeſſion; and if the latter account is true, it conveys a very important information to the navy, which for their ſakes cannot be made too public.

---

* It was not my deſign to diſperſe a bubo in *a ſtate of ſuppuration*, but the *Mercury*, which it was neceſſary to adminiſter, to check the ſpreading ſtate of the chancre, occaſioned the ſwelling to diſappear. Some, however, (Dr. *Aſtruc* among the reſt) do not diſcourage the practice of repelling buboes.

CASE the SECOND.

C. D. came to me with a ſore upon his forehead, about the ſize of a ſixpence, with thick callous edges. He had chancres about a month before, and had given over the uſe of *Mercury* too ſoon. I had no doubt of the ſore's being venereal, and gave him the *Calomel*; he took two grains twice a day, rubbed only upon the lips; this he continued to do for three weeks; the ſore was quite healed in that time. I continued the *Mercury*, two grains every day, for a fortnight longer: he had glandular ſwellings of the neck, which alſo, during this proceſs, went away. Mr. *Cruikſhank* frequently ſaw this patient during his cure, and heard him declare he was neither griped nor purged by the proceſs.

---

* This ſhould always be done after the chancre is healed, particularly when there is *any hardneſs* left in the ſkin, which is as dangerous as an *open chancre*, and ſhews that the poiſon lurks within.

CASE the THIRD.

E. F. had a hoarſeneſs and pain in her bones, the remains of a *lues* ſuppoſed to be cured two years before; ſhe had alſo chancres of a recent date. She took three grains of *Calomel* in my method twice a day. Upon the third day ſhe began to ſpit gently; had no griping or purging: a profuſe ſweat came on at this time, and the hoarſeneſs and pain in her bones almoſt immediately left her. The ſalivation continued for a fortnight or more without any addition of *Mercury*, and the chancres were cured. She appeared perfectly well, and I thought I had done enough, as I am by no means convinced that much Mercury, but the method of employing it, is the chief circumſtance in curing this diſeaſe. About three weeks after ſhe returned, and appeared to be in a very poor way; ſhe now informed me of a complaint ſhe had formerly ſuppoſed to be the *piles*, but which I found was a venereal *ficus*; had I known of this I would not have interrupted the mercurial proceſs. I was now obliged to give her the *Calomel* again in the ſame way, which again made her mouth ſore, and had the ſame effects as before: as ſhe got well I continued the *Calo-*

mel in ſmaller doſes for ſome little time; ſhe was cured in a few weeks, and has continued ſo ever ſince.

CASE the FOURTH.

G. H. about thirty years of age, had a ſmall *chancre* upon the prepuce; he had alſo a *gonorrhœa*, and uneaſy ſenſations in the inguinal glands. I gave him two grains of the *Calomel* twice a day, which were rubbed upon the ſurface of the lips only; upon the fourth and fifth day his breath was become fœtid, and his mouth tender, and by the ſeventh day the chancre was entirely healed. There was not the leaſt remains of uneaſineſs in the inguinal glands, and the *gonorrhœa* was much better, though not then perfectly removed.

CASE the FIFTH.

I. K. had chancres upon the *glans penis*, with *phimoſis*. Through neglect, the chancres had made a very rapid progreſs. I thought it neceſſary to affect the mouth as ſoon as poſſible, and to throw in a very large quantity of the *Calomel*; accordingly the firſt day he took three grains twice, but the two next days the *Mercury* was increaſed to ſix grains twice in the day. The ſecond day he felt his mouth tender and inflamed, upon the third the ſalivation came on, and continued pretty ſmart for a fortnight; the progreſs of the diſeaſe was checked the inſtant his mouth became ſore; the ſymptomatic fever (which often attends a chancre) left him, and he gradually got well, and at the end of a month was completely cured. He was not purged by the Mercury. Mr. *Savage* (apothecary) ſaw this patient frequently during his illneſs.

CASE the SIXTH.

L. M. applied to me with a depaſcent venereal ulcer in the integuments of the *abdomen* below the navel, near the ſize of a ſhilling in circumference; in depth the ſore would have contained two kidney-beans. This patient ſuffered extreme pain for ſeveral days before ſhe came to me. I directed her to rub two grains of *Calomel* on the inſide of the mouth twice a day for three or four days, at the expiration of which time ſhe complained of her mouth being very tender and painful, and her breath affected. The ſore immediately became eaſy, wore a kind aſpect, granulated well, and was entirely healed within a month. I continued the *Calomel* ſome time longer, in ſmaller doſes, to prevent a relapſe: ſhe has remained perfectly well ever ſince. The wound was dreſſed with oil and a ſoft cerate. She was not purged with the medicine, looked healthy and florid in her countenance, and had remarkable good ſpirits while under cure. She was not confined a day at home on this account, and came to me twice or thrice every week.

The REMARKS *of Dr.* Hunter *on Mr.* Clare's *New Method of introducing Mercury into the circulation.*

"AS the *external* ſurface of the body (ſays the Doctor) is every where bibulous, ſo is the *internal*. There can be no doubt of abſorption taking place on the inſide of the mouth, of the *præputium*, of the *labia*, (lips,)

(lips,) &c. and any fine powder, capable of being abſorbed there, will, no doubt, be more readily abſorbed when mixed with a watery fluid. When mixed with oil, and applied to wet ſurfaces, it may be preſumed that it will be kept at ſome diſtance. It is likewiſe very probable, that, when the *Calomel* is rubbed upon the ſurfaces of the mouth, what gets into the ſtomach is carried down ſo gradually, and diffuſed over ſo great a ſurface, that it will ſtimulate the *primæ viæ* much leſs; and people with very tender bowels may therefore bear it much better than when given in pills, boluſes, &c. And it is reaſonable to ſuppoſe, that watery fluids will, in general, be more readily abſorbed, perhaps even when applied to the outward ſurface."

Anſwers to ſome Objections, which have been made to this New Mercurial Proceſs, and were communicated to me by a worthy Friend.*

IT has been ſaid, that "Mercury "employed in the method recom- "mended by me, ſtimulates the ſali- "vary glands, (as acrid, aromatic, "and other ſubſtances do), and only "excites a momentary ſalivation, and "that the *Calomel* does not properly "and fairly enter into the ſyſtem."

In anſwer to this, *E. F.* caſe the 3d, was as completely ſalivated and cured, as ſhe could poſſibly have been by any mercurial courſe.—Dr. *Hunter* ſaw this patient whilſt in a ſalivary ſtate, and acknowledged to me in writing, that he found her *ſpitting moſt kindly*.—She had not ſwallowed any of the *Calomel*, and had *no looſe ſtool*,

---

* Dr. *John Jebb*.

ſtool, and her breath was fœtid. Her ſalivation continued copiouſly for more than a fortnight, which would not have been the caſe, if the *Mercury had ſtimulated the glands locally*, without having penetrated the ſyſtem; nor would her diſorder, which was very inveterate, have been cured, unleſs this had been the caſe. All the cures which are related, alike prove that the *Mercury* was effectually introduced into the ſyſtem *.

It has been urged that "the rub-
"bing *Calomel* on the ſurfaces of the
"mouth, renders the teeth black."

This ſeems to be mere conjecture, not founded on fact, and urged to prejudice the minds of patients againſt this practice. During a long continued mercurial courſe of any ſort, the teeth will become black and dirty; but whether this is owing to the *Mercury* alone, or to the neglect of cleaning the teeth, (an operation which at theſe times is always forbidden), I will not pretend to ſay. I am fully perſuaded that *Calomel* rubbed on the ſurfaces of the mouth and gums, does not render the teeth black by local application; and none of my patients have complained at any time of this circumſtance.

---

* Mr. *Cruikſhank* obſerves, that "the *Calomel* producing evident effects on the diſeaſe for which it was exhibited, ſhews that it has certainly got into the habit, or, in other words, that it has been abſorbed by the ſurface to which it was applied." Letter, p. 187, head the 3d.

It has been remarked that "the "*Calomel* leaves *a diſagreeable and* "*braſſy taſte in the mouth.*"

It is not often that patients complain of this; there occurs, indeed, a method of obviating this objection, by applying *the Calomel* in form of *a ſuppoſitory* to the internal villous ſurface of the *rectum*, which is eſteemed *the beſt abſorbing ſurface of the body*. It cannot be doubted but that this (though I confeſs I never tried it) would prove a very efficacious and ſafe (though not a delicate) mode of adminiſtering a mercurial remedy.

It muſt be remarked that *Mercury*, in whatever form adminiſtered, will impart *the braſſy taſte* when it is admitted into the circulation: in my method, indeed, the diſagreeable taſte is perceived at the firſt; ſo is that of *the bark*, and other valuable medicines; which circumſtance does not at all prevent their general uſe.

It is ſaid, "How can a glandular, "ſecreting ſurface, a ſurface con-"ſtantly pouring out, and which of "courſe may be preſumed to waſh off "every thing laid on it, be a good "abſorbing ſurface * ?"

---

* "Whatever force this reaſoning may ſeem "to have, when applied to dead ſurfaces, it "muſt

In ſhort, there is no plan or propoſal to which objections may not be raiſed, either real or plauſible: I only wiſh the advantages and diſadvantages in the preſent caſe to be candidly and maturely weighed, and the merits to be determined accordingly. Truth is the ſolid foundation on which this proceſs reſts; and I have no doubt of its gaining additional ſtrength, and more extenſive influence every day; ſince Time, that great deſtroyer of all other things, adds permanency and force to Truth.

" Truth ought to be the only aim
" in every controverſy, and if that is
" on my ſide, I regard not cenſure.

" muſt loſe its weight with thoſe who reflect, " that the ſurface under conſideration is a living " one. For, if it is a good objection againſt the " fitneſs for abſorbing in a ſurface, that it is a " ſecreting one; the very ſame objection lies " againſt moſt ſurfaces, and may be urged againſt " the beſt abſorbing ſurface of the body, the in-" ternal ſurface of the inteſtines." *Cruikſhank*'s Letter, p. 186.

" I have been always careful never " to arrogate to myſelf what I learned from others, but candidly owned " to whom I have been obliged; a " practice not very common at this " day. Do we not ſee many treatiſes " filled up as it were with what their " authors have ſtolen from others " without naming them; claiming " diſcoveries they never made, and " pluming themſelves with borrowed " feathers?" See Dr. *Hope*'s Appendix to *Alſton*'s Lectures on the *Materia Medica*, vol. ii. p. 584.

* * *

AN ESSAY ON ABSCESSES, &c.

On the Nature and Formation of Abſceſſes.

AN abſceſs is a collection of matter commonly ſeated in the adipoſe or cellular membrane, the immediate connecting ſubſtance betwixt the muſcles and ſkin, and which connects the fibres of muſcles themſelves. The formation and advancement to ſuppuration is uſually attended with great pain, fever, and *rigors*; which laſt ſeem to be the ſymptoms of a conſtitution labouring under ſome morbid attack *.

Abſceſſes generally make their way by degrees from within towards the ſkin, the external ſurface of the body. Nature here indicates to the ſurgeon what line of conduct he ought to purſue; whether to make an aperture and diſcharge the matter, or leave it to her, which ſhe will effect ſooner or later,

---

* When the contents of a tumour are doubtful, and ſuſpected to be matter, it is uſual to make enquiry if there have been any *ſhiverings*, ſince matter is ſeldom formed without that previous notice; yet this is not a certain rule. Dr. *Hugh Smith* puts the following queſtion;—— "Have we any rules to judge when an inflammation verges to ſuppuration, or when there may enſue a diſpoſition to gangrene? It has been ſuppoſed that we may judge of the ſuppuration of an inflammatory tumour, by the frequent and involuntary ſhiverings the patient ſhall be attacked with: but if a mortification ſhould have ſupervened, the pulſe will immediately ſink, and become ſcarce perceptible, cold ſweats and a general languor will ſucceed, the preludes to an approaching diſſolution and inevitable death." Eſſays Phyſiological and Practical, p. 123.

later, according to the ſtate and circumſtances of the conſtitution. How very imprope then muſt it be to endeavour to repel abſceſſes, and oppoſe ſuch ſalutary attempts made by the conſtitution!

On Suppuration.

EVERY abſceſs is attended with inflammation, but every inflammation does not terminate in *ſuppuration:* now an abſceſs, being uſually the criſis of ſome internal diſorder, ought by all means to be encouraged; but a ſimple inflammation, ariſing from an external cauſe, often is and may be diſperſed with the utmoſt ſafety and propriety.

The conſtitution is in ſome meaſure aſſiſted in its purpoſe of *ſuppuration*, by emollient cataplaſms and anodyne fomentations, which, by their relaxing qualities, when the ſkin is tenſe and inflamed, give conſiderable eaſe *. Where the pain and tenſion is not great, a warm plaiſter is as proper, and more convenient. When the fever is high, *ſuppuration* commonly makes rapid advances, which are aſſiſted by a free and generous regimen; evacuations therefore, which obſtruct its progreſs, are condemned as improper and dangerous in all critical abſceſſes.——Mr. *Sharp* indeed, in his Introduction to a Treatiſe on the Operations of Surgery, p. 11, has obſerved, "that bleeding, when the ſuppuration has not kindly advanced, has ſometimes quickened it exceedingly, but, however, that this practice is to be followed with caution *."

---

* The ingredients of a poultice ſhould be boiled till it leaves the ſides of the veſſel, and becoming ſtiff, adheres to the ſpoon.—It ſhould have an unctuous, oily ſurface, and be applied warm.

Fomentations are of peculiar ſervice, as their ſubtle vapours penetrate the pores of the ſkin, the orifices of which being very minute, often refuſe the admiſſion of oil or water, wherefore fomentations give relief when other applications fail.——The ſtupes ſhould be wrung as dry as poſſible, and applied comfortably warm. Emollient ointments and liniments relax and cool the ſkin, yet, unleſs they are rendered *anodyne*, have little or no effect beyond the external ſurface.——*Opiates* internally adminiſtered aſſuage the pain, and aſſiſt maturation.

If the inflammation is very great, there is danger of a mortification; blood-letting, by moderating this inflammation, may promote ſuppuration, and do good †. We ſhould not be

---

* Mr. *Sharp* adds,—" Phyſicians do now ac-
" knowledge that *bleeding* on certain occaſions in
" the ſmall pox, is not only no impediment to
" the maturation, but even promotes it; ſo in the
" formation of abſceſſes alſo, when the veſſels
" have been clogged."—" Purges are, no doubt,
" improper at this time; yet if the patient be
" coſtive, he muſt be aſſiſted with gentle clyſters
" every two or three days."

† Dr. *Hugh Smith* obſerves, in his Eſſays Phyſiological, &c. that " if the fever ſhould run too high, with great heat and a pulſe full and ſtrong, a moderate blood-letting will prove rather uſeful than diſſerviceable to promote the ſuppuration." p. 103.

be ſatisfied with a partial collection of matter, leſt there ſhould be a ſecond gathering, but ſhould wait till the whole is completely formed, which is known by a palpable fluctuation on compreſſing it, and by the protuberance and thinneſs of the ſkin. Veſications of the cuticle often appear at this time, and indicate an approaching aperture: this is the critical ſeaſon for making it, unleſs it ſhould be deemed more adviſeable to leave the opening to be effected by the exertions of nature and the conſtitution.

As there is no rule without an exception, ſo we muſt not in every caſe wait till the tumour is fully ſuppurated; and if we find it *receding*, and the patient's health affected by the abſorption of the peccant humours into the habit, we are fairly warranted in making an earlier opening.

Of opening Abſceſſes.

WHEN an abſceſs breaks of itſelf, there is uſually a ſmall orifice, which does not prove ſufficient to diſcharge the contained matter properly, and heals in general before it has produced the deſired effect; which circumſtance has induced the profeſſion to make larger openings, that there might be no confinement of the matter within the ſkin *.—For this purpoſe ſome practitioners prefer the knife, others the cauſtic. The advocates for the former dwell much, and with ſome reaſon, on the utility of preſerving the ſkin as much as poſſible, which is done by a ſimple diviſion of it, when it recedes only for a time, reſuming its former ſtate as the wound heals, and frequently without loſing many of its fibres. This is the great and perhaps only advantage of the knife. When we make the opening by cauſtic, in moſt caſes the circumjacent ſkin will at laſt be drawn in, will cover the greateſt part of the ſore, and very little new ſkin will be wanted.

---

* It muſt be owned notwithſtanding, that ſmall apertures ſometimes effect a cure;—for there have been inſtances of female patients, urged by their fears, having had frequent expoſtulations with their ſurgeons concerning the knife, and of their having refuſed to admit the exerciſe of it in abſceſſes of the breaſt in particular. Regardleſs of the different opinion of the profeſſion, they had recourſe to poultices, the repetitions of which have occaſioned one or more openings; theſe continuing uncloſed, by means of gentle and frequent preſſure have effected ſound and perfect cures, and the ſucceſs has induced many ſurgeons to adopt the practice, from which they alſo have experienced the ſame happy event.

On the Application of the Cauſtic.

THERE is no better cauſtic than the paſte of the London Diſpenſatory. "* Let an orifice be cut in a piece of ſticking-plaiſter, nearly as big as you mean to make the eſchar, which being applied to the part, the cauſtic muſt be laid on the opening, and preſerved in its ſituation by a few ſlips of plaiſter placed round its edges, and a large piece over the whole;" a bandage is likewiſe neceſſary; notwithſtanding which the cauſtic uſually ſpreads one third beyond the limits preſcribed by the plaiſter.

The cauſtic being placed on the tumour, and continued there three or four hours, cauſes death in, or a mortification of, a certain portion of the ſkin and integuments. This operation is attended with different degrees of pain, according to the condition of the ſkin, which, in a cool and uninflamed ſtate, bears the cauſtic much better than when in a contrary one; for at that time the ſlighteſt preſſure of the finger hurts exceedingly; it may be neceſſary even in ſuch a ſituation however to employ the cauſtic, but ſurgeons now frequently mix it with opium.--Cauſtics, it is evident, ſometimes give but little pain, for, having been applied as common plaiſters, and repreſented as ſuch to the patient, he has not known that he had undergone this operation *.

---

* See Mr. *Sharp*'s Introduction, &c.

A great

---

* Mr. *Elſe* ſays, "Within this laſt twelve-
" month only, we have mixed *opium* with our
" cauſtic, and we have reaſon to think it greatly
" leſſens the pain, inſomuch that ſeveral patients
" have fallen aſleep during its operation, and all
" have owned that it was very eaſy to bear; nor
" does the *opium* appear in the leaſt to deſtroy
" the

A great advantage of the cauſtic is the room it makes for a free and complete diſcharge; and this treatment is very rarely followed by *ſinuſes*, jagged lips, and callous or inverted edges, which ſo often appear after the uſe of the knife, even in good habits of body *.

“ the virtue of the cauſtic.” *Eſſay on the Cure of the Hydrocele*, p. 33; where he recommends the Cauſtic in preference to Inciſion.

That I may not be miſunderſtood by thoſe readers who are not of the profeſſion, it muſt be obſerved, that *the opening abſceſſes by cauſtic* is here recommended rather than *by inciſion*; but ſo far from being an advocate for *cauſtic* and corroding applications *to ſores*, I entirely diſapprove of them, having ſeen much miſchief ariſe from their uſe.

* A ſinus is preſumed whenever the diſcharge is greater than might be expected from the ſize of the ſore. It is cured by compreſs and bandage, eſpecially when aſſiſted by proper medicines. When theſe fail, recourſe is had to inciſion. Mr. *Sharp* and Mr. *Pott* have recommended the knife in preference to the ſciſſars, which, happily for mankind, are falling into general diſrepute, and which theſe gentlemen condemn in the ſtrongeſt terms, on account of their pinching at the ſame time that they cut; beſides, the lips of wounds ſo divided, tumify, are generally painful for ſeveral days, and indiſpoſed for healing. Mr. *Pott* ſays,

On the Cure of Abſceſſes by Cauſtic.

WHEN the cauſtic is removed, the matter ſometimes burſts forth; when it does not, it may be ſet at liberty by the introduction of the lancet, which is now not felt at all, if the cauſtic has duly performed it's office. The eſchar commonly ſeparates in five or ſix days. Some ſurgeons apply hot terebinthinate dreſſings, imagining them to draw, and

---

" that ſciſſars are an inſtrument that may aſſiſt " an awkward or unſteady hand, but are more " fit for a farrier than a ſurgeon." *Fiſtula in Ano*, p. 49.

Counter, and particularly depending openings, judiciouſly made, preſerve ſkin, and cure many ſinuſes. There cannot be a more abſurd or cruel practice than to cut away an oval, circular, or indeed any piece of the ſound ſkin of an abſceſs, after making a longitudinal inciſion. Exciſion of the ſkin is recommended by Mr. *Sharp* where there is much of it *diſcoloured*; but, as ſkin, greatly diſcoloured, will often recover its complexion, and when much diſeaſed will periſh of itſelf, this practice can ſeldom be neceſſary.

and help the ſeparation mechanically; when in truth this event is produced by the riſing granulations underneath throwing out the eſchar; which ſhews it to be the act of nature and the conſtitution, external dreſſings availing little; but internal medicines, which add vigour and impulſe to the circulation, are certainly of uſe on that principle.

Inciſed wounds are not ſo eaſily dreſſed, on account of their lips, as thoſe by *cauſtic*; and ſome practitioners have obſerved, that much miſchief is done by the improper mode of dreſſing wounds made by *inciſion*, either by diſtending them with large and hard doſſils, or by dreſſing them too ſuperficially; but the ſore from *a cauſtic* is liable neither to one nor the other of theſe evils, ſince the cure advances of itſelf, requiring the leaſt aſſiſtance imaginable. This ſurely is a ſtrong circumſtance in favour of the latter. Another of as great importance is, that *a cauſtic*, of the ſize of a ſixpence, laid on a depending part, will effect a cure as completely as an inciſion of ſeveral inches of the ſkin, which I have known frequently, and others of the profeſſion have obſerved the ſame, particularly in large abſceſſes near the *rectum*, called ſometimes *Incomplete Fiſtulæ*; as well as in other parts *.

Mr. *Sharp* ſays, " When iſſues are " made, or bones expoſed, the eſchar " ſhould be cut out immediately, or " the next day."—This operation muſt give great pain to the patient, and ſome to the ſurgeon alſo, if he poſſeſſes thoſe tender feelings, for which Mr. *Sharp* was always eſteemed, as well as for his judgement and ſingular dexterity in the operative parts of ſurgery.—The eſchar, it is certain, need not be cut out.—One or more kidney or French beans, with a proper compreſs and bandage, will adapt themſelves, immediately after the ſeparation of the eſchar, with very little pain; and, on account of their form, are preferable to peas, which penetrate ſo deep into wounds, as not only to be painful, but injurious.

---

* Daily experience evinces the little neceſſity there is in general for openings either by the knife or cauſtic in theſe kinds of abſceſſes. When they become really fiſtulous the caſe is altered, and a diviſion of the ſinus becomes neceſſary.—Reſtoratives to amend the conſtitution ought however to be given previous to inciſion, there having been repeated inſtances where ſuch remedies alone have effected a cure.

Cauſtics are never applied to abſceſſes about the face, for an obvious reaſon.

CHirurgical writers deſcribe wounds and ulcers as going through three ſtages in the courſe of their cure,—*Digeſtion*, *Incarnation*, and *Cicatrization*.

Of Digeſtion.

IN the firſt ſtage, that of *digeſtion*, (which is the formation of a certain quantity of *good pus* * upon the ſurface of a ſore), oily dreſſings are moſt in uſe, and theſe may be applied warm, but not hot; it being an eſtabliſhed poſition, to the honour of modern ſurgery, that the moſt mild and eaſy applications anſwer this purpoſe beſt. It is perhaps doubtful whether there are any applications which actually promote *digeſtion*; but theſe may be conſidered in effect *digeſtives*, as giving no interruption to Nature in this great and important buſineſs, whilſt painful dreſſings, conſiſting of hard doſſils, and loaded with corroſive powders, (falſely called *Digeſtives*), defeat the very aim and purpoſe they were intended to promote. *Digeſtion is an act of the conſtitution*; and when the latter is in a good ſtate, the former advances properly. When the *vis vitæ* is defective, internal medicine and a nutritious regimen are required, and do infinitely more good than any external applications whatſoever.

---

* *Pus laudabile.*

Of Incarnation.

THE ſecond ſtage is that of *incarnation*, in which the wound fills up with *granulations of fleſh*, and, when healthy, has a florid aſpect, which is an excellent ſymptom. When theſe granulations are luxuriant, and riſe above the edges of the wound, it has been uſual to call ſuch an appearance a *Fungus*, and to apply corroding medicines to reduce it to a level with the ſkin; but theſe commonly give great pain, and protract the cure. Happily they are now laid aſide in a great meaſure, authors and practitioners of the greateſt abilities declaring, that dry lint with moderate preſſure is generally ſufficient to reſtrain ſuch luxuriancy.

Mr. *Sharp* obſerves, with regard to the *fungus* in a wound made by a ſharp inſtrument, where there is no indiſpoſition of body, " that dry lint only is generally the beſt dreſſing: at firſt, it ſtops the blood with leſs injury than any ſtyptic powders or waters; and afterwards, by abſorbing the matter, which in the beginning of *ſuppuration* is thin and acrimonious, it becomes, in effect, a *digeſtive*. During *incarnation* it is the ſofteſt medium that can be applied betwixt the roller and tender *granulations*; and, at the ſame time, is an eaſy compreſs upon the ſprouting *fungus*."—This is perfectly lenient and ſenſible, and compriſes no ſmall part of the proceſs of healing ſores in few words.

Mr. *Freke*, in his Eſſay on *the Art of Healing*, publiſhed in the year 1748, was the firſt writer who oppoſed the application of cauſtic and corroding dreſſings to fungous ulcers, and recommended warm poultices to promote perſpiration in the parts affected; remarking, that *callous* edges were beſt ſubdued by relaxing means: in this mild doctrine he is ſupported by many modern practitioners, who have laboured to eſtabliſh it for the greater immediate eaſe, as well as future benefit of their fellow-creatures. Formerly ſurgeons pared away *callous edges* with the knife; and what was the conſequence? After the moſt excruciating pain, *the calloſities* returned; the cauſe, namely the bad habit, remaining, and an irritation being kept up inimical to *healing*, which, on the contrary, is beſt advanced by the perfect tranquillity (and, when the ulcers are in the legs, by the *horizontal poſition* alſo) of the part affected.

Mr. *Freke* further obſerves, page 107, that "all writers on this ſub-"ject have agreed to ſubdue *fun-*"*guſes* only by drying *vitriolic* or "cauſtical applications; whereas my "method is quite contrary to what "is univerſally laid down; which "is, that greaſy or mucilaginous re-"laxing medicines do ever create "*funguſes*. I readily own the pro-"poſition to be true, for which rea-"ſon I make uſe of a mucilaginous "cataplaſm to relax theſe ſchirrous "diſeaſed parts, and thereby make "them diſcharge their enemy. And

“ in theſe caſes I let the *fungus* in-
“ creaſe as much as it will.”

Again, page 110; “ I never think
“ of deſtroying it by *vitriol or the*
“ *like*, but rather chooſe to give a
“ full looſe to the parts, finding
“ them healing faſter from the edges
“ when the ſtrangulation has been
“ taken off, by ſweating out that
“ which occupied ſpaces which did
“ not belong to it, rather than by
“ art, cropping off the top of the
“ *fungus by vitriol*, &c. and thereby
“ forcing it to heal, whilſt it remains
“ callous and diſeaſed.”

Theſe obſervations, and many others, the reſult of long experience in St. Bartholomew's Hoſpital, as well as an extenſive practice elſewhere, ſhew Mr. *Freke* to have been a man of a penetrating genius, and ſound judgement, with great knowledge of the healing art. They are his own original ideas, and form the baſis of the modern mild approved practice, which, without doubt, will ſtand the teſt of future ages.

Recent bland oil, either in its liquid form, or modified with wax or diachylon, is an univerſal and proper dreſſing for ſores.

The healing of a ſore is the act of the conſtitution, and depends on internal impulſe, not on the ſpecific quality of unguents. Theſe, when of a lenient quality and freſh made, do good, by keeping the part moiſt, and defending it from the air; when rancid they do miſchief, though compoſed at firſt of ingredients perfectly mild and innocent. Oil is artificial *pus*, which laſt, when of good quality and conſiſtence, protects and comforts the tender wound; when acrid, it cauſes pain and miſchief; in which caſe recent oil, mixing with the matter, and correcting its pernicious quality, gives eaſe. When the *pus* is mild, yet too redundant, dry lint abſorbs it, renders the ſore clean and comfortable, and may be continued till the diſcharge becomes ſo ſmall as not to moiſten the lint ſufficiently to prevent its adheſion. This ſhould be laid light and thin on the middle, and not cover the edges of the ſore*.

---

* Some may be induced to remark, that the doctrine here laid down, with regard to what are called healing ointments, *viz.* that they are ſo ſimple, ought not to be divulged, as it may encourage improper perſons to interfere in caſes of ſurgery, to the injury of the public and the profeſſors of the art of healing. In my opinion, the making our art plain and intelligible is the only way to prevent mankind from being impoſed on by empirical pretenders. Surgeons have no objections to their patients underſtanding the nature of the diſorder or of the remedies, wiſhing to convince their reaſon and judgement, and not, like empirics, to deprive them of both. In matters of phyſic and ſurgery, the merit conſiſts as much, and perhaps more, in the judicious application of remedies, than in the remedies themſelves.

We cannot adduce a greater proof of *Nature's ſtrong propenſity to heal*, than the inſtance of the difficulty with which a pea is retained in an iſſue, or a tent in a wound; where, notwithſtanding the utmoſt exertions from preſſure and bandage, Nature oft prevails, throws out the offenſive extraneous body, and heals the orifice.

In like manner will wounds *incarnate* in defiance of mal-practice. Nature one day puts forth her granulations of fleſh, which are *the proper and only materials* for filling up a ſore; the next, perhaps corroſive medicines are applied to deſtroy theſe luxuriant granulations, too often falſely called *Fungi*, or proud fleſh; and thus is the conſtitution counteracted in its ſalutary endeavours *. The abſurdity of of ſuch treatment is evident to every unprejudiced obſerver *.

---

* Mr. *Freke* ſays, p. 126, " A ſurgeon is but a " ſcavenger to Nature; for, if the various parts " of the blood did not ſupply the many loſſes

What the antients endeavoured to effect by painful eſcharotics externally applied, the wiſeſt of the modern profeſſors accompliſh by internal, invigorating medicines, aſſiſting Nature and correcting the habit; knowing that to be the only rational method of *healing* which takes away the preventing cauſe, whatever it be.

Cicatrization.

CICATRIZATION is the laſt ſtage, and completes the cure.

Sores are covered over, firſt, by the elongation of the ſurrounding old ſkin,

---

" of the body, what could the ſurgeon's art do " for his patient ?"

* A little dry lint, or lint ſpread with a mild cerate, or poultice which imbibes the *pus* and keeps the ſore clean, is all that is here required.

ſkin, which is drawn in towards the centre of the ſore; then, by the formation of the new; and ſometimes from different ſmall points (like iſlands) in the wound, which in this caſe *cicatrizes* faſt.

An even *cicatrix* is much to be wiſhed, and (except in caſes of burns and ſcalds) is often eaſily obtained by proper bandage. In common inciſed wounds, where the habit of body is good, the *cicatrix* is formed without any trouble; whilſt in ulcers of long ſtanding this latter part of the cure takes up much time, and requires ſome deliberation. In theſe caſes, deſiccative topical applications are generally condemned, fatal conſequences * having ariſen from the ſudden ſtoppage of habitual diſcharges. The general ſenſe of the profeſſion, and indeed of mankind at large, is, that Nature ſhould take her own time to effect this her laſt act in the cure of every wound; the preſumption will then be, that ſuch ſores will not break out again. Some think it is owing to the application of drying powders and ointments, commonly uſed to expedite the cure, that newly-healed wounds ſometimes open again; an accident which the ſurgeon attributes to a very common, though, it is preſumed, not always the true cauſe, the bad conſtitution of the patient *.

---

* Apoplexies, Aſthma's, &c.

To prevent the return of ſores, eſpecially old habitual ones, iſſues near the part affected are uſually and ſtrongly recommended: I have often known them made without any advantage; for all the art of ſurgery

---

* Several extraordinary and well authenticated cures of habitual ulcers performed by the *Malvern* waters, are related by Dr. *Wall* in a late publication, which contains a great deal of very uſeful information on the ſubject of the healing art.

could not keep them open any length of time, but the conſtitution would have recourſe to its old drain; happily indeed for the patient, if we are to form our judgement from common ſenſe, reaſon, and experience.— *Ab extrà intùs redire, malum eſt.*

An equal bandage, which juſt properly ſupports the parts, eſpecially when the ſores are in the lower limbs, ſeems to be the beſt ſecurity againſt a relapſe.

On the Inoſculation of Wounds; or healing by the Firſt Intention [*].

IF there needed any further proof how unneceſſary a multiplicity of healing ointments are in good conſtitutions,

---

[*] When the lips of freſh wounds are brought into immediate contact, and unite at once without paſſing through the different ſtages common to other ſores, thoſe of *Digeſtion*, *Incarnation*, and *Cicatrization*, they are then ſaid to heal *by the firſt Intention*, by *Inoſculation*.

tutions, we might inſtance the caſe of freſh wounds, where there is a ſimple diviſion of the ſkin and integuments, the lips of which being brought into contact with each other, and ſo retained by plaiſter or other bandage, will heal in a few hours by *the firſt intention*. The blood alone is here eſteemed the beſt medicine, ſufficient without ointment, and preferable to all the ſolutions of gums in ſpirits, called Balſams, which many people apply; they appear to me only to give the patient pain, without rendering him any benefit in return. Mr. *Freke* indeed recommends the uſe of balſams to lacerated wounds, " as a varniſh to cover ſuch ſmall filaments, or lacerated parts of the wound, as the air without it would immediately take hold of and mortify." p. 128.

Inſtances of union by the firſt intention are ſeen every day, and often very ſtriking ones. I ſhall mention a very ſingular one.——During my apprenticeſhip, a youth, about twelve or thirteen, living at the Dog Tavern, *Garlick-hill*, had the misfortune to fall upon the edge of a caſe knife, which penetrated the left lobe of the lungs, the air from which nearly extinguiſhed the flame of a candle. The hæmorrhage from the wound was conſiderable, till Mr. *Pott* placed the lad on his back, when the bleeding ſtopped. It was dreſſed lightly with dry lint; but fearing it might bleed internally, he made an unfavourable prognoſtic, and was moſt agreeably ſurpriſed to find his patient had no bad ſymptoms. He recovered in leſs than a fortnight; whence it was concluded the balſamic quality of his blood, uniting the wound by the firſt intention, had effected the cure. He was bled at firſt, to guard againſt the ſymptomatic fever.

Several inſtances of the remarkable inoſculation of ſores, are to be met with in Dr. *Kirkland*'s Treatiſe on Fractures, lately publiſhed.

On SUTURES.

OF all the modern improvements in ſurgery, none pleaſes me more than the general diſuſe of needles and ligatures in freſh wounds; they generally did a great deal of miſchief. There ſtill are caſes, however, where one ſuture or more are abſolutely neceſſary; as in wounds of the lip, throat, ſcalp, and other parts *.

---

* When there is a diviſion of the ſkin of the throat and *trachea arteria*, it is abſolutely neceſſary to make uſe of the ſuture to the external wound, but not to ſtitch the windpipe, as wounds of that part heal well in a ſhort time, and much better without the needle than with it.

Where the lips of wounds can be brought nearly or quite into contact with each other, adheſive plaiſter and retentive bandage (abſurdly called *the dry ſuture*) are quite ſufficient, and ſave the patient an infinite deal of pain and trouble, attendant on the true ſuture with needle and ligature.

It is well known, that ſutures are only temporary, and that the threads cut their way out, as the ſore digeſts; that they are introduced with much pain, exciting inflammation, and ſometimes fever, whereby the cure of wounds is greatly protracted. But it muſt alſo be admitted, that they are often uſeful, particularly where *the dry ſuture* cannot be employed in ſuch manner as to ſecure immoveably the divided parts.

The operation for the hare-lip may be performed without needles, by means of adheſive plaiſter and a bandage,

dage, the threads of which interſect each other, drawing in oppoſite directions, bringing the divided edges into approximation, and retaining them in that ſtate. The inciſed lips are beſt kept in their due poſition, firſt by a ſlip of *gummy Court plaiſter*, and finally ſecured by this ſort of bandage, which Dr. *Hunter* uſed to exhibit in his lectures.

Obſervations on the Uſe and Abuſe of the Bougie.

A Young perſon labouring under a continual diarrhœa, which had reduced him to the laſt ſtage of *an hectic*, ſent for me at the requeſt of the medical gentlemen who attended him.

The water which paſſed by the urethra being in very ſmall quantity, led us to ſuſpect a communicating aperture betwixt the urethra and the rectum. Having ſatisfied ourſelves in this particular, and proved beyond a doubt that it was ſo, we paſſed *the ſilver flexible catheter*, and drew off a conſiderable quantity of urine. As it was neceſſary an inſtrument ſhould be left in the paſſage to bring away the water as it was collecting, we ſubſtituted *the hollow bougie*, ſmeared firſt (as is uſual) with oil, which gave no pain, and afforded nature an opportunity of healing the wound, by taking away the preventing cauſe, the inceſſant irritation from the ſalt urine. He was cured in a month, and recovered his former health and vigour.

The bougie here, as in many other caſes, was highly beneficial. This operation requires in general the cautious hand of a ſurgeon, as bad conſequences have ariſen from paſſing bougies, particularly on aged perſons.—

Two ſingular caſes have come within my knowledge; one was that of a perſon of thirty years of age, who, inſtead of the ſurgeon's bougie, made uſe of a common wax * taper, (an article in which he dealt,) and this excited pain and inflammation. He deſiſted, however, from the practice, before he had done himſelf any conſiderable miſchief. The other was a gentleman of threeſcore, who thought to effect the removal of his complaint by violence, (poor miſtaken man!) inſtead of gradual dilatation, without

---

* "The old ſurgeons employed upon theſe occaſions a ſmall wax candle (bougie); but the wax often melting in the urethra, and the wick ſometimes breaking in the extraction, and a part of it remaining in the paſſage, the danger of this accident has for many years brought it into diſuſe, and the bougie is now made of cloth dipt in wax or plaiſter, and then rolled up into the proper form. Theſe bougies are of all ſizes, from that of a knitting needle to the ſize of a large catheter." Mr. *Sharp*'s Critical Inquiry, &c. p. 148. ——Surgeons formerly uſed leaden and whalebone bougies. *Ibid.*

irritation or pain, which is the only rational, ſafe, and efficacious method of uſing the bougie. A mortification of the urinary paſſage and bladder preſently enſued, and he died the following day.

Much has been ſaid and written concerning *the ſpecific quality of bougies*. Monſr. *Daran*, who introduced them into general uſe, certainly merits great praiſe on that account, as the diſorders of the urethra and bladder, *ſtrictures and ſuppreſſions of urine*, which are dreadful to bear, have been and are daily and happily relieved by their means. Wiſhing, however, to monopolize their ſale, Monſr. *Daran* inſiſted vehemently on the *ſpecific*, *ſuppurative*, *balſamic*, *detergent*, and other excellencies of his particular bougie. Many ſurgeons finding their experiments very ſucceſsful, have imagined that they had diſcovered

Daran's own compoſition, not giving themſelves leave to think there might be a variety of compoſitions capable of producing nearly the ſame effects. Their bougies were made of *a proper conſiſtence and mild quality*, in which, it is now univerſally allowed, doth conſiſt their principal and indeed their only excellence.

This ingenious foreigner had the addreſs to perſuade patients, that his bougies brought on a ſuppuration, and extracted the latent poiſon. They knew not that any bougie would cauſe ſome diſcharge, when introduced into the urinary paſſage even of one who never had any diſorder in thoſe parts; for want of which piece of neceſſary information, they were eaſily deceived by his ſpecious and very plauſible doctrine.

After introducing the bougie, he uſed to leave it in the *urethra* for five or ſix hours, when he would return to his patient and extract it, and finding it covered with *mucus* of courſe, he called this *the ſuppuration* ariſing from the *medicinal virtues of his bougie.*

Many ſurgeons do not retain the *bougie* in the urethra of their patients more than a minute or two, and find it ſucceeds beſt when not continued there. Others, where the ſtricture is obſtinate, or of conſiderable ſtanding, keep it in the paſſage a much longer time; and when it gives no pain there, we may fairly conclude it does no miſchief, but probably the contrary *.

---

* When it is to remain long in the urinary canal, the bougie ſhould be ſecured with thread from ſlipping into the bladder. Dr. *Hunter* attended ſuch an accident once, in conſultation with Sir *Cæſar Hawkins.* The bougie inſinuated itſelf into the bladder in the night. They tried all means, and, amongſt the reſt, they put the patient into the warm bath, made him keep his urine, which at laſt forced the bougie out of the urethra

A bougie of a tolerable ſize, that of a crow's quill, will generally be introduced with more eaſe than a very ſmall one, the extremity of which becoming a ſharp point, is apt to inſinuate itſelf into the *lacunæ* of the urethra, and cauſe a pricking pain. Yet when the urinary paſſage is very much contracted in its diameter from the thickneſs of its membranous coat, a very ſmall bougie may at leaſt for ſome time be abſolutely requiſite.

urethra in three or four folds, the plaiſter being melted away, and the bougie reduced to its priſtine ſtate, that of a rag or ſlip of cloth. The patient narrowly eſcaped an operation by the knife.

Obſervations on the Stone in the Kidneys and Bladder.

THESE are very common and dreadful complaints of the urinary paſſage. When the ſtone has been generated in the kidney, and is endeavouring to deſcend through the *ureters* into the bladder, the pain is moſt excruciating and hardly to be borne, owing to the ſtones ſudden and great diſtenſion of thoſe ſmall nervous tubes the ureters, the diameters of whoſe canals are ſo very ſmall as to convey the urine, only drop by drop, into the bladder. To facilitate the deſcent of the ſtone, ſome have recommended ſtrong *diuretic* medicines, and other forcing liquors, not generally approved of by the more judicious practitioner, who will commonly ſubſtitute oily relaxing anodynes, warm bath, and lubricating medicines, in their ſtead, allowing time for the ſlow and gradual dilatation of this narrow paſſage *.

When

---

* " When calculous concretions are actually formed in the kidneys, and are to be brought away by the ureters, the caſe requires very prudent management. It is a very common error in practice, to give ſtrong, forcing diuretics, with an imaginary view of driving out the gravel with the urine: whereas this intention is anſwered with greater ſafety in moſt caſes, by relaxing and lubricating medicines; eſpecially if, in caſe of violent pain, bleeding be premiſed, and anodynes interſperſed. For a ſtone is never forced out while the patient is in great torture, though, when the pain ceaſes, it ſometimes comes away unexpectedly, and almoſt of its own accord, with the urine. And the reaſon of this is, that pain conſtringes the fibres of the parts, which reſume their natural ſtate, and perform their functions properly, when the troubleſome ſenſation is over. Wherefore three or four grains of *opium*, diſſolved in five or ſix ounces of the common decoction, may be given by way of glyſter, which will greatly relieve the pain, and ſometimes procure greater advantages. However, there are conjunctures, after the pain is abated, when powerful diuretics may be adminiſtered; but with this precaution, that as ſoon as they have had their effect, they are no longer to be continued.

" All

When the ſtone is arrived at the bladder, there are many ſpecific remedies

---

" All this time the body ſhould be conſtantly kept open; wherefore in caſe of coſtiveneſs, it will be expedient to give a turpentine glyſter, and ſometimes to purge gently with infuſion of ſena and manna; but ſtrong cathartics are to be avoided. Of the lubricating medicines above-mentioned, the chief are oil of ſweet almonds, ſyrup of marſhmallows, emulſions made with almonds, and the like; to which may be added, the uſe of the warm bath: but among the powerful diuretics, turpentine and ſoap are the beſt. Such is the courſe to be purſued in the paroxyſm of the diſeaſe. But, out of it, the patient ſhould uſe bodily exerciſe, eſpecially riding every day, but ſo as not to fatigue: his food ſhould be mild, and of eaſy digeſtion; and his drink either ſmall wine and water, or new ſoft ale, which will be rendered better and wholeſomer if ground-ivy leaves be infuſed in it while it is working. Mead is likewiſe a proper drink; for honey is an excellent diuretic. A ſpoonful alſo of honey in a glaſs or two of the infuſion of marſhmallow roots is an admirable cleanſer of the kidneys, if uſed for a conſtancy. The wines ought to be the ſofteſt and ſmootheſt that can be had, and the lighteſt; cleareſt river or running water is preferable to all other. For, as *Pliny* ſays, thoſe ſprings are particularly condemned, the waters of which line the veſſels in which they are boiled with thick cruſts." *Mead's* Medical Works, vol. iii. chap. x. p. 95.

medies recommended by empirics, as capable of diſſolving it. Such of them as have acquired any great degree of reputation, have accompliſhed it by *ſoap lees*, a medicine of a ſtrong cauſtic quality, and conſequently very prejudicial to the nervous tender coats of the ſtomach. Therefore ſome, who even in this way are not ſo deſtitute of ſenſe and humanity as others of them are, adminiſter the lees in broth, which, ſheathing its lixivial ſalts, takes off its *ſtimulus* in a great meaſure; and even when thus medicated with all their care, it has ſtill the pernicious effects of drams, and in time gives their patients a certain *quietus*. When this medicine is in the regular hands of the profeſſion, they are more tender of their patients, and of their own reputation, than to put either to the hazard; and if they find themſelves under a neceſſity of preſcribing the lixivium, they adapt the doſe with judgement, and every prudent, neceſſary caution; but they generally try other medicines firſt, which are not exceptionable, and yet conduce as much, perhaps more, to the relief of their afflicted patients.

The object of the faculty has ever been to diſcover an effectual yet ſafe remedy for this diſorder: their experiments have been endleſs. They have found many ſolvents for the ſtone, ſome which cauſed it's ſolution preſently, others which required a longer time. They have experienced ſeveral attempts to impoſe on their underſtandings. One empirical pretender had almoſt ſucceeded, by a feat of legerdemain. A party being aſſembled on this occaſion, he told them, he had a ſmall phial in his pocket containing a liquid which would certainly diſſolve a ſtone in the bladder; and he declared at the ſame time that it was perfectly innocent, and might be given with ſafety to a child. The gentlemen preſent ſaw the liquor poured into a veſſel upon a ſtone, and perceiving it diſſolve almoſt immediately, were much pleaſed; however they determined to put the man to his teſt that very inſtant. He had ſaid he would ſwallow the liquor, to convince the ſpectators of the innocence of his *ſpecific*. He drank off the fluid in their preſence, to their great aſtoniſhment; but, on an immediate ſearch, a phial apparently filled with the ſame liquor was found upon him; the contents of this they then challenged him to drink; which he refuſed. He therefore was diſmiſſed their preſence with diſgrace. —It is much to be lamented that we know not of any medicine capable of diſſolving the ſtone, and which can at the ſame time be conveyed with ſafety into the bladder, either by the ſtomach and kidneys, or the urethra, without exciting pain, and conſequent inflammation of the parts through which it is obliged to paſs. Several years ago, the parliament offered a large reward for the diſcovery of an effectual *lithontriptic*. The reward was afterwards claimed and paid *. One of the patients appointed for trial of this celebrated remedy, was examined in the uſual way by the faculty,

---

* " I cannot avoid obſerving, though I am extremely ſorry for the occaſion, that ſome gentlemen of the faculty, a few years ſince, acted a part much beneath their character, firſt in ſuffering themſelves to be impoſed on, and then in encouraging the legiſlature to purchaſe an old woman's medicine at an exorbitant price; by vouching that it was capable of breaking the ſtone in the bladder, and bringing away the fragments with the urine. This medicine is a compoſition of ſoap and lime made of different ſhells, which every body knows to be highly cauſtic. And while the ſcheme was carrying on, ſome ſtones cut out of the bladders of patients who had uſed the medicine, were very induſtriouſly handed about, as a teſtimony of its lithontriptic quality; becauſe

becauſe theſe ſtones had inequalities and holes here and there in their ſurface, which were aſſerted to be eroſions made by the medicine. But thoſe gentlemen ought to have known that ſtones are ſometimes naturally formed in the bladder with ſuch inequalities and pits on their ſurface, as may be miſtaken for real eroſions: ſeveral examples of which have fallen under my own obſervation. So great is Nature's variety in forming calculous concretions, &c.

" Now whereas ſuch vaſt encomiums were beſtowed on this new medicine, as it was then called; it is no way ſtrange that our legiſlature ſhould deſire to purchaſe the manner of making it almoſt at any price, in order to publiſh it for the benefit of the commonwealth. And indeed the purchaſe redounds as much to their honour, as it does to the diſcredit of their adviſers, who ought to have known, that things endued with ſuch a corroſive quality as to be able to diſſolve the ſtone, could not lodge in the bladder without injuring that organ.

" As nothing ought to be diſguiſed, no truth concealed in a matter of ſuch moment, I muſt take notice of the experiments made by Dr. *Whytt* of *Edinburgh* on this ſubject. That gentleman, after ſeriouſly conſidering the inconveniencies, and ſometimes the miſchiefs alſo of this celebrated ſpecific, reſolved to omit the ſoap, and try what virtues lime-water might have in diſſolving faculty, and the ſtone was diſtinctly heard when touched by the inſtrument. The gentlemen unanimouſly agreed that this was a very fair caſe for the experiment. The courſe of medicines was immediately entered upon and continued for many months, when the patient found himſelf relieved of his pains, and *apparently* cured. The faculty again met, and re-examining him in the ſame manner, candidly

---

ing the calculus. His firſt experiments were made on ſeveral fragments of calculi with lime-water from common quick-lime; and afterwards reſolving to try the power of animal-lime, he repeated them with lime-water made with oyſter-ſhells and cockle-ſhells well calcined, by pouring ſeven or eight pints of water on one pound of the freſh calcined ſhells. The experiments ſucceeded with both ſorts; but he ſoon found, that the oyſter and cockle-ſhell lime-water poſſeſſed a much greater power of diſſolving the calculus than that of ſtone-lime. The quantity he recommends, is four pints every day for adults, and for children leſs in proportion; and he concludes with inſtances of the happy effects of this method.—His whole diſſertation is very well worth the peruſal." *Mead*'s Medical Works, vol. iii. chap. x. p. 95.

candidly owned they could not perceive the *calculus*. One of them indeed ſaid, Though it was true he could not feel the ſtone, yet he did not believe the medicine could poſſibly have diſſolved it. The fact being ſo well proved, he was thought obſtinate. This patient dying ſoon after, the bladder was laid open, and no *calculus* could be found. The incredulous gentleman however, taking hold of the *fundus* of the bladder, ſhook it, when a clattering noiſe, ſuch as ariſes from a colliſion of ſtones, was diſtinctly heard; "I thought," ſaid he, "there were ſtones; and," with an emphaſis, "here they are!" ——— In ſhort, it appeared that ſeveral ſtones had, by their weight and preſſure on the inner membranous coat of the bladder, formed themſelves cyſts or pouches, and lay there ſecure and fixed; through which fortunate circumſtance *(it is preſumed)* his pains immediately left him. A moſt happy event, from whatever cauſe. Dr. *Hunter* exhibits the *calculi* in their reſpective cyſts, at his lectures, giving an account of them, which I have taken the liberty to relate briefly, and as well as I could from memory.

A particular friend of mine has voided, within theſe twelve months, ſome ſmall ſtones, which (in the opinion of Dr. *Hunter* and Mr. *Cruikſhank*) had been generated in the kidneys. He paſſed much gravel every day in his urine, which was high coloured, and often bloody. Conſtitutionally troubled with this diſorder, he had increaſed it by too frequently drinking pump water. By taking honey ſeveral times every day, in tea or otherwiſe, to the amount of a pound in a week, by abſtaining

ing from water, and drinking mild porter twice every day, he has been free from any actual *calculi* for ſome months paſt; but he daily voids of late great quantities of a *looſe ſabulous matter*, which appears to be the effect of this proceſs, ſince what paſſed before that time was of a more firm and calculous texture *.

---

* The account given of the ſtone by Dr. *Smith* is very conciſe and pertinent: ‘ The intentions of ‘ cure in the ſtone are twofold; radical and palliative. The radical will conſiſt in taking away ‘ or diſſolving the ſtone. The palliative in the ‘ relief of the moſt urgent ſymptoms.

‘ The ſtone may be taken away by the operation of *Lithotomy*; or under ſome circumſtances may be diſſolved by the preparations of ‘ lime. The *Sapo amygdalin.* or *Sapo venet.* may ‘ be taken from ʒij. to ℥ſs. or ʒvi. morning and ‘ evening; and lime water mixed with a fourth ‘ part of milk may be drank from a quart to ‘ three pints every day. The ſymptoms are beſt ‘ palliated by opiates, by the mouth and glyſterwiſe, with gentle laxatives, and the mucilaginous relaxing medicines.’ *Formulæ Medicamentorum*, p. 135.

On Herniæ.

AN *Hernia (Rupture* or *Deſcent)* is a diſeaſe much more common than is generally imagined, being oft times hereditary, and kept of courſe very ſecret, none being willing to expoſe their own bodily or family infirmities to the world.—When the inteſtine has been ſome time in a ſtate of *incarceration*, ſo that the *fæces* cannot obtain a paſſage, and the inteſtine cannot be returned into the *abdomen*, the operation * with the knife then becomes

---

* This is an operation in itſelf very dangerous, and becomes much more ſo by being commonly delayed too long. It demands a very minute and accurate knowledge of the anatomical ſtructure of the diſeaſed parts, and a very dexterous and ſteady hand. The critical time for operating is a ſubject of great conſideration, and requires a ſound and diſcriminating judgement.

When a *crepitus* is perceptible on handling the tumour, we may be aſſured the knife has been becomes abſolutely requiſite; it is therefore much to be wiſhed that this was rendered leſs frequently, or not at all neceſſary.

The *clyſma fumoſum* (tobacco glyſter) has been ſometimes employed of late in theſe caſes with ſucceſs *; and perhaps

---

been deferred too long, and now would only bring diſgrace upon the operator; this *emphyſema* being an infallible ſymptom of actual mortification.

* The particular machines for conveying the tobacco are either a pair of bellows with a worm tube, or large ſyringe, by which means great quantities of the ſmoke of this powerfully ſtimulating plant are thrown into the inflamed but torpid inteſtines, frequently procuring a copious evacuation of their indurated contents, and a return of the *hernia*, when all other means had been tried without ſucceſs.

Some ſurgeons prefer the infuſion of the tobacco to the fumes, which are injected glyſterwiſe, and with equal ſucceſs. — The infuſion is made by pouring one pint of boiling water on one drachm of tobacco.—Mr. *Pott*, in his Chirurgical Obſervations, p. 117, " recommends the application of cold diſcutients, (which Mr. *Sharp* thinks have a dangerous tendency) rather than warm relaxants, ſuch as poultices, which having no effect beyond the ſkin, cannot remove the ſtricture perhaps would ſucceed much oftener if the application of it was at the beginning of the ſtrangulation, inſtead of being deferred almoſt to the laſt.

It behoves every patient who has a returnable *hernia*, to have *a pro-*

per

ſtricture made by the tendon. Practitioners alſo are here cautioned againſt handling *herniæ* too much in endeavouring to return them, ſuch attempts being very hazardous when the inteſtine is highly inflamed, and may probably bring on a gangrene."

It is not meant to diſcourage every gentle method of effecting the *manual reduction* by the advantage of a decumbent poſition of body, and by adviſing the patient to draw in his breath, *&c.* which efforts are to be continued ſo long only as there is any reaſonable proſpect of ſucceſs. Blood-letting *(uſque ad deliquium animi)* even till he faints, by inducing a general relaxation of the body, has often promoted the reduction ſo ardently deſired.

Mr. *Sharp* ſays,—" The reduction by the hand ſhould be performed with great caution; and in the *Bubonocele* we ſhould always endeavour to puſh the parts towards the *ilium*, that being the direction in which the *Hernia* lies: we muſt not compreſs too rudely, nor muſt we ſoon deſiſt from the attempt, for by long handling it we frequently at length ſucceed." *Critical Enquiry*, &c. page 22.

per truſs immediately *, to prevent a deſcent of the parts; and it ſhould be conſtantly worn; ſince, without ſuch ſecurity, he would be in hourly danger of his life †.—This caution is of ſo much importance, that it cannot be too often repeated. The greateſt care muſt likewiſe be taken that the gut does not ſlip down under the

---

* The *Bubonocele*, (rupture in the groin) Mr. *Sharp* obſerves, 'is a frequent complaint; but 'much the greater part of theſe *Hernia's* are re'covered by the mere ſtrength of nature, for as 'they advance from their infant ſtate, the muſ'cles of the abdomen and the tendons of the 'rings become more rigid, and reſiſt to the fu'ture falling of the *viſcera*. When the diſorder 'happens to children of about two years of age, 'the proper bandages to ſupport the *Hernia* with'in the abdomen are more neceſſary; not but 'that nature overcomes the illneſs in every part 'of youth, though the older the patient is, the 'more neceſſary it will be to call in the aſſiſtance 'of art; but ſtill it muſt be remembered that, 'even in the moſt tender infancy, *a truſs* is uſe'ful, if it can be applied without galling the 'child.' *Critical Enquiry*, &c. p. 9.

† Many years ago, a celebrated practitioner in *rupture curing*, whoſe abilities and cures had been often called in queſtion, undertook to produce a number of patients (whom he pretended to have radically cured), to undergo an inſpection.—They were introduced with their bandages on, and ſuppoſed themſelves to be perfectly well. Being

truſs,

Being directed to take off their truſſes, they were convinced of their miſtake by the *immediate* deſcent of their ruptures.

There are two other inſtances on record of the impoſition of *rupture curers*. One of the injured parties told me how ill he had been uſed; but I was no ſtranger to the affair. It had been argued in *Weſtminſter Hall.* An empiric brought an action ſome years ſince againſt this man, for a very exorbitant ſum, for the cure of a rupture; when it appeared in court, that the complaint had *not* been *a rupture*, *but an abſceſs.* This he had opened with a lancet, which he would not have done (as it would have been immediately mortal), if he had not known what the diſorder really was. He was caſt of courſe. — The other is a late and a ſimilar tranſaction; and this empiric was alſo defeated, in a court of juſtice.— It is notorious that theſe people ſometimes add murder to their other crimes: they have wantonly and daringly performed this very dangerous operation (which is only juſtifiable where life is at ſtake) on patients who made no other complaint than of the weight and incumbrance of their Ruptures.

———*Quid non mortalia pectora cogis,*
Auri ſacra fames?

truſs, the preſſure of which would give great pain, and might produce the worſt of conſequences: this muſt be particularly noticed by the parents of children; grown people would be directed by their own feelings to remove ſo great an evil. Youth may expect a perfect and *radical* cure of ruptures from an early application to bandage, which often produces an union and conſolidation of the apertures or rings of the abdomen. In advanced life theſe implements are generally *palliative*, yet always a preſervative from any fatal miſchief. Internal remedies, unleſs merely to prevent conſtipation of the belly, are idle and trifling, or meant to deceive, and are adminiſtered only by empirics. When the contents of a rupture are not returnable, and at the ſame time not ſtrangulated, a *ſuſpenſory* affords great accommodation and relief.

Obſervations on the treatment of Fractures called Compound.

FRACTURES are called *compound*, when there is a wound in the external integuments made by the fractured extremities of the bone: when the fracture is attended with a wound not made by a protruſion of the bone, it is called *complicated*; a caſe by no means ſo dangerous in general as the *compound* fracture. The hazard is judged to ariſe principally from the admiſſion of *air* into the injured part; the modern method of cure is therefore to exclude it as much as poſſible, and by this method to reduce the *compound* to the ſtate of a *ſimple* fracture. This is Mr. *Freke*'s opinion, page 129. " It is owing to " the *air* that a *compound fracture* " differs ſo greatly from a ſimple " one: for, though the bones in *a*

“ *ſimple fracture* be ever ſo much lacerated, it ſeldom or never, with proper care, fails of doing well; but if the ſkin be broken ever ſo little, if the air be admitted to ſome extravaſated blood, it makes a terrible difference betwixt one *fracture* and the other, which every knowing practitioner finds there is, from the cauſes before given.”

The external remedies in theſe caſes have commonly been oily relaxing liniments and poultices, which requiring frequent renewal expoſe the ſore to the bad influence of the air, and encourage too copious a diſcharge. This circumſtance reduces the patient’s ſtrength exceedingly, ſo that the bark, and other reſtorative cordials, given with the greateſt propriety and moſt liberal uſe, are not able to prevent the patient from ſinking.

Senſible of this circumſtance, both *Engliſh* and *French* ſurgeons have, for ſome years paſt, adopted aſtringent and ſpirituous embrocations in compound fractures, moiſtening the dreſſings and bandage frequently with theſe, and forbearing to renew them as long as poſſible, that the external air might not gain admiſſion; they had ſeen, no doubt, the ill conſequence of ſuch practice, and how much the patient's ſafety depended on the former precaution. Sinuſes, ſo common in theſe caſes, have been hereby prevented, as well as long confinement and delay: for it is certain that the *Callus*, whereby the fractured extremities of bones are united, cannot form whilſt the matter lodges, and cauſes a continual interruption to Nature in her important work.

It has been generally remarked, that the cure *of compound fractures* does not ſucceed ſo well in the *London* hoſpitals as in the country, where the air is more pure and conducive to health. On this account, the *London* ſurgeons recommend *amputation*, the country practitioners diſſuade us from it; which difference of opinion gave riſe to the following remarks. "It "is very poſſible, however, that the "attempt to ſave the limb in one "caſe, and its ſpeedy removal in the "other, may be both equally right; "ſince the difference between the air "of a crowded city hoſpital and that "of a private chamber in the country, "will give room to expect a very dif-"ferent event in ſimilar accidents *." Inſtead of the ſpeedy removal of the limb in the latter caſe, ſuppoſe we were to remove the patient into the country, (which might eaſily be done by means of thoſe ſplints recommended

---

* *Monthly Review* for laſt *March*, p. 243.

mended by Mr. *William Sharp*, which ſo commodiouſly bring gentlemen to town who are ſo unfortunate to break their legs in the country) there could be no doubt but the humanity of the governors of the city hoſpitals would readily induce them to provide for any expence thereby incurred, which ſhould be the means of ſaving the lives or limbs of our fellow creatures.——There is another, and which appears to me a very probable reaſon of the ill ſucceſs of compound fractures in the *London* hoſpitals, the free and intemperate way of life of the lower claſſes of the people in this metropolis, who, by indulging themſelves greatly in ſpirituous liquors, impair their conſtitutions, inſomuch that when an accident befalls them, their blood is too much vitiated and impoveriſhed to admit of a cure: hence a mortification enſues, and even the bark, that ſovereign remedy, fails in its wonted relief.

Several years ago Mr. *Pott* unfortunately met with a compound fracture of his leg by a fall from his horſe, at the time of my living with him, and of courſe I was a witneſs to the proceedings in the cure. The accident was treated like a ſimple fracture, and the air excluded.

His age was betwixt forty and fifty, and his conſtitution good; the wound healed without any ſinus, and the callus was completely formed in eight or ten weeks. If relaxing means had been uſed, ſuch as poultices, which are here improper for the reaſons before mentioned, it is a queſtion if this gentleman's many ſubſequent ſervices would not have been loſt to the community *.

---

* Previous to his own accident, Mr. *Pott* had treated caſes of this kind in the hoſpital with great

I was ſome time ago favoured with the caſe of a compound fracture of the fore-finger of a ſmith's apprentice, in the pariſh of *St. Clement Dane* in the *Strand.* The bone was broken obliquely, ſo that the two extremities

great ſucceſs; amongſt which was that of a boy of eight or ten years of age, who had a fracture of the radius, which protruded through the ſkin. It was bound up as a ſimple fracture, and the wound was healed in a fortnight.

Two other caſes in private practice have ſince fallen under my care, and were ſucceſsfully treated in this way. One of them was a gentleman of the Stamp Office, forty years of age, temperate, and of a ſpare habit. His leg was fractured, and did well in eight weeks without any bad ſymptoms. The other was a gentlewoman of fifty, and of a groſs habit, who recovered in twelve weeks by the free uſe of bark and opiates. Here the ſymptomatic fever ran very high at firſt.

Theſe patients were laid on their ſide with the knee bent, the poſition recommended by Mr. *Pott*, and Mr. *William Sharp*, by which the muſcles are in a ſtate of relaxation; in the old poſition theſe were always extended and in a ſtate of action, which occaſioned frequent and ſudden ſpaſms, attended with pain and laſſitude, to the great diſtreſs of the patient, and the delay of his cure.

extremities formed ſharp points. The divided part was ſuſpended only by a very ſmall portion of the ſkin; and being inſtantly replaced in a proper poſition by an eminent ſurgeon in the neighbourhood, defended by plaiſter, ſplints, &c. by the excluſion of the air, and the happineſs of a good conſtitution, the uſe of the finger was in a great meaſure reſtored in a few weeks. There being at firſt, all but an entire ſolution of continuity of the ſkin, this caſe would have been deſpaired of by ſome who have leſs faith, becauſe they have leſs knowledge, in Nature's healing powers, than the gentleman to whom this boy fortunately applied for relief.

I have known an accident, in moſt reſpects ſimilar to the above, where a child's finger, which had been fractured, was evidently loſt by the application of a poultice immediately to the ſore, which prevented it healing by *the firſt intention*, and was injurious alſo on account of its weight *.

---

* The introduction of the following caſe ſhews that Dr. *Hunter*'s advice has been, to treat the *compound* in the ſame manner as the *ſimple* fracture, and I believe no one will deny that improvement to be his. If it ſhould be hereafter diſputed, the Doctor's numerous pupils can prove this, as clearly as they have his right to many other important medical improvements and anatomical diſcoveries.

This caſe is a well-known fact; and though ſome have ſaid it had the appearance of a fable, yet all agree that the moral is excellent.

Dr. *Kirkland* having had remarkably good ſucceſs in the treatment of compound fractures, the reader is referred to his late publication, which diſplays the man of feeling as well as ability and extenſive experience.

The Caſe of a Compound Fracture, related by Dr. HUNTER *at his Lectures.*

SPEAKING of the nature and cure of *ſimple* and *compound* fractures, Dr. *Hunter* obſerved, in his lectures, that, in treating the *compound*, many ſurgeons did miſchief, and irritated the wound, by their officious and artificial manner of dreſſing it. Inſtead of that practice, he recommended treating the *compound*, as much as poſſible, in the ſame way as the *ſimple* fracture: and in confirmation of that practice, uſed to relate the following ſingular caſe, which was always heard with great attention, becauſe the inſtruction was conveyed in the way of pleaſantry.

" A maniacal patient, Mr. *G*——, who was confined in the Infirmary at *Edin-*

Edinburgh," (he ſays it was about thirty years ago), " ſeeming to have recovered a calm and rational ſtate of mind, was allowed to take an airing in the garden by himſelf. Here he took the reſolution of making his eſcape; and got over the garden wall. In dropping himſelf from the wall, which was very high, he pulled a large cape-ſtone along with him, and ſuffered a very bad *compound* fracture in his leg. He was carried round, and lodged again in the Infirmary, in this unhappy condition; and the ſurgeon, who was preſently brought to him, ſet the leg, dreſſed the wound, applied the eighteen-tailed bandage, &c. in the uſual way. After all this, the patient appearing to be very calm, the ſurgeon gave ſome proper directions, went away, and the patient was left alone to get ſome reſt, which was thought proper, and ſeemed to be his own deſire. His madneſs now took a ſingularly whimſical turn: he knew very well that he had got a miſerable broken leg; but his crazy imagination made him believe, that the ſurgeon had miſtaken the leg, had beſtowed all his cunning upon the ſound leg which required no attention, and had left the ſhattered limb to ſhift for itſelf. Under this firm perſuaſion, convinced that his ſurgeon was too ignorant to perceive his blunder, too conceited to be ſet right, and too proud to ſuffer ſuch humiliation, he thought it would be moſt prudent, in his preſent ſtate of ſubjection, for the cure of his broken leg, to make the beſt uſe he could, of the judgment and dexterity which God had given him. He removed the whole *apparatus* from the broken leg, with great attention, that he might be able to apply it to the other leg, ſo exactly in the ſame manner, that the ſurgeon ſhould not be able to diſcover the alteration; and, leſt any ſuſpicion ſhould ariſe, and lead to an inquiry and diſcovery, he thought he ſhould be ſtill more ſecure, by ſecreting or hiding the other leg, that it might not be found, and appear in evidence againſt him. He therefore tore a large hole in the ſheet and featherbed, and buried the wounded leg among the feathers.

" The next day, when the ſurgeon viſited him, he ſaid, that for a while he had been in pain, but that by a fortunate and accidental motion of the foot, the pain went off, as by a charm; that he had continued perfectly eaſy ever ſince; and therefore was reſolved to keep it as ſteadily as poſſible in the ſame ſituation. The ſurgeon finding him eaſy, the pulſe quiet, and no ſymptom whatever of fever, went to the foot of the bed, and lifting up the clothes, ſaid, Let us juſt ſee how the foot and leg look. The patient ſeemed much alarmed with the propoſal, and entreated him, for mercy's ſake, to deſiſt; becauſe, he ſaid, the leaſt motion in the world would diſturb it, and bring all his pains back again. The ſurgeon aſſured him that the bed-clothes touched nothing but the cradle, and that the lifting of them up could not in the leaſt move either the leg or foot; and then, obſerving to the ſtudents that the appearance of the foot was as favourable as he could wiſh, he expreſſed his ſatisfaction, and went away. Every day's viſit, after this, turned out equally ſatisfactory, both to the ſurgeon and patient, till the fifth or ſixth day, when the ſurgeon grew very anxious to ſee the wound, leſt any lurking miſchief ſhould be concealed, and was determined to remove the dreſſings. This the patient reſiſted, firſt with prayers, and then with imprecations and rage; but at laſt he was obliged to ſubmit. The ſurgeon, with a cautious and tender hand, removed the bandages, and, as he went on, expreſſed the pleaſure which he felt on ſeeing the ſkin, both above and below the wound, in ſo natural a condition. At length he lifted up the dreſſings, which he found were quite looſe, and, ſeeing a leg now perfectly ſound, which, a few days before, he had ſeen in ſuch a lamentable ſtate, you can better conceive than I can tell how he looked. After a ſhort pauſe, he paſſed his fingers along the *tibia*, and then ſaid, I only know that a fracture and wound there certainly was, and now there is certainly neither. Preſently he recovered himſelf enough to recollect that it was the other leg which he had ſet and dreſſed; and ſaid, Where is the other leg? turning off the bed-clothes at the ſame time. Lunaticks are quick in reſources, not eaſily put out of countenance, and imagine that no body can doubt what they aſſert. Mr. *G*———, ſenſible now that the leg would be diſcovered, drew it out from among the feathers, ſaying, with great expreſſion of reſentment and rage, that he would now expoſe the ſurgeon's ignorance to the whole world; that he always knew ſurgeons to be a ſet of ignorant fellows, though they wore large wigs; and now he would prove it, by a ſhocking inſtance, to the ſatisfaction of all preſent. This leg, ſaid he, holding out the broken leg, with a great cake of blood and feathers cruſted over and round the wound, this leg, thank God! is as ſound as any man's:—

there, pointing to the other, is the broken leg,—you ſee what a deſperate condition it is in;—and that fellow, being called, did nothing for it:—he was called to ſet a broken leg; but he did not know a broken leg, and bound up this. After venting ſome more of his indignation and rage in ſarcaſtic and coarſe language, he begged that ſome of the young ſurgeons would bind up his broken leg again (meaning the ſound one), for that it was in great pain, was much diſturbed with this impertinent examination, and, if not taken care of, would make him a miſerable object, at beſt a cripple for life. The ſurgeon ſeeing his patient's imagination ſo ſtrongly perverted, and being convinced, by the agitation which that miſapprehenſion had raiſed, that it would be, upon the whole, ſafer to indulge him in his wild conceit, with humanity as well as good ſenſe, deſired the young men to humour him, by putting the *apparatus* on the ſound leg. From that time he was calm, and, in all other things, reaſonable. The cure went on with perfect ſucceſs;—the ſcab of feathers at laſt dropped off;—the wound was then found to be healed, and the callus compleated: A memorable leſſon for ſurgeons, and a ſtriking inſtance of the weakneſs of human reaſon, of the imperfection of our boaſted art, and of the power of Nature!*"

---

* Having ſeen many inſtances of the abſurd practice deſcribed by Mr. *Pott*, relative to *the riſing ends of broken bones, particularly in ſimple fractures of the clavicle*, and having often wiſhed to ſee this very great error properly cenſured, a paſſage is here inſerted from Mr. *Pott*'s works, which ſets that matter in a clear and ſenſible point of view. 'He will, for example, know '(ſays Mr. *Pott*) that the prominent part of a 'broken clavicle, that part of it which is next 'to the *Sternum*, is juſt where it ſhould be, 'and that the inferior part, that which is con'nected with the *Scapula*, is out of it's place,

' by being drawn down by the weight of the
' arm; and therefore, inſtead of loading, as is
' uſual, the prominent part with quantities of
' compreſs, which never can do any ſervice, he,
' by a proper elevation of the arm, will bring the
' lower end upward into contact with the other,
' and thereby with very little trouble accompliſh
' what he never can do in any other manner,
' however operoſe. The ſame thing will happen
' from the ſame principles in the leg and thigh,
' &c.' Vide Chirurgical Obſervations, p. 71.

A
GLOSSARY
OF THE
TERMS of ART.

A

ABDOMEN, the belly.

Abſceſs, a gathering of matter.

Abſorbs, licks up.

Acrimonious, acrid, ſharp.

Adheſion, ſticking.

Amputation, the cutting off.

Aperture, opening.

Approximation, the bringing parts together.

B

Bubonocele, rupture in the groin.

C

Calculous, ſtony.

Callous, hard.

Calloſities, hardneſſes.
Callus, what knits a broken bone.
Cataplaſms, poultices.
Catheter, an inſtrument to draw off urine.
Cauſtic, a burning ſubſtance.
Cellular membrane, fat.
Cicatrization, ſkinning over.
Conſtipation, coſtiveneſs.
Contact, touch.
Corroding, eating.
Criſis, the height or point.
Cuticle, ſcarf-ſkin.
Cuticular, of very thin ſkin.

D

Decumbent, lying down.
Depaſcent, ſpreading.
Deſiccative, drying.
Diarrhœa, a flux.
Digeſtion, good diſcharge.
Diuretic, which provokes urine.
Dyſentery, bloody flux.

E

Elongation, lengthening out.
Embrocation, a lotion or waſh.
Emollient, ſoftening.
Eſchar, a ſlough or mortification.
Eſcharotic, eating, burning.
Excreſcence, fungous diſeaſed fleſh, or wart.
Exfoliation, caſting off of the bone.
Extirpation, taking off by the roots.

Extraneous, foreign.
Extravaſated, forced out of its proper veſſels.

F

Fæces, excrement.
Florid, roſy, red.
Fungus, looſe ſpungy fleſh.

G

Gonorrhœa, a virulent diſcharge from the urethra.
Granulations, ſmall dots or points of fleſh in any wound.

H

Hæmorrhage, flux of blood.
Hæmoptoe, ſpitting of blood.
Hernia, rupture.
Hydrocele, a cyſt or bag of water.
Hydraulic, conveying water through pipes and conduits.

I

Incarnation, filling up with fleſh.
Incarceration, confinement.
Inciſed wounds, cuts.
Inguinal, belonging to the groin.
Inoſculation, union of the lips of wounds by contact.
Inteſtines, the bowels.
Integument, the covering or ſkin of the body.
Irritation, pain.

L

Lacunæ, ſlits or nooks.
Liniment, ſoft ointment.
Lithontriptic, medicines which diſſolve the ſtone.
Longitudinal, lengthways.
Lubricating, ſoftening, ſmooth, ſlippery.
Lues, a confirmed venereal diſeaſe.
Luxuriancy, plenty.

M

Manual, by the hand.
To maſticate, to chew.
Maturation, ripening.
Membrana adipoſa, the cellular membrane, or fat.
Morbid, diſeaſed.
Mucilaginous, ſlimy.
Mucus, ſlime, a compound of a mucilage and water.

O

Orifice, an opening.
Oeſophagus, gullet.

P

Peccant, bad, hurtful.
Phagedenic, eating, ſpreading.
Præputium, prepuce, foreſkin of the penis.
Primæ viæ, the firſt paſſages of an animal body, ſtomach, &c.
Protuberance, ſwelling.
Pus, matter from a ſore.

R

Rectum, fundament.
Rigors, ſhiverings.

S

Sabulous, ſandy.
Saliva, ſpittle or mucilaginous fluid.
Sinuſes, hollow places in ulcers.
Solution of continuity, ſeparation of parts.
Suppuration, formation of matter.
Suſpenſory, truſs.
Suture, ſewing.

T

Therapeutic, which teaches the healing of diſeaſes.
Topical, applied to ſome particular part.
Trachea arteria, wind-pipe.
Tumify, ſwell.

U

Veſications, bliſterings, or ſeparations of the cuticle or ſcarf ſkin.
Virus, poiſon.
Vis vitæ, the conſtitution.
Unctuous, greaſy.
Unguent, ointment.

FINIS.

MVSEVM
BRITAN
NICVM